DUS DEAS 914

DRAFT UGANDA STANDARD

First Edition
2018-mm-dd

Mild steel nails — Specification

Reference number
DUS DEAS 914: 2018

Compliance with this standard does not, of itself confer immunity from legal obligations

A Uganda Standard does not purport to include all necessary provisions of a contract. Users are responsible for its correct application

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National foreword

Uganda National Bureau of Standards (UNBS) is a parastatal under the Ministry of Trade, Industry and Cooperatives established under Cap 327, of the Laws of Uganda, as amended. UNBS is mandated to co-ordinate the elaboration of standards and is

(a) a member of International Organisation for Standardisation (ISO) and

(b) a contact point for the WHO/FAO Codex Alimentarius Commission on Food Standards, and

(c) the National Enquiry Point on TBT Agreement of the World Trade Organisation (WTO).

The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of representatives of consumers, traders, academicians, manufacturers, government and other stakeholders.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.

This Draft Uganda Standard, DUS DEAS 914:2018*, Mild steel nails — Specification,* is identical with and has been reproduced from an East African Standard, EAS 914:2018*, Mild steel nails — Specification,* and is being proposed for adoption as a Uganda Standard.

This standard was developed by Mechanical engineering and metallurgy Standards Technical Committee (UNBS/TC 4).

This standard cancels and replaces US 194-1:2016, *Nails — Part 1: Steel nails — Specification.*

Wherever the words, “East African Standard " appear, they should be replaced by "Uganda Standard."

DRAFT EAST AFRICAN STANDARD

DEAS 914:2018 - Mild steel nails - Specifications

EAST AFRICAN COMMUNITY

Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

DEAS 914:2018, was prepared by Technical Committee EASC/TC 035 *Steel and Steel*

Mild steel nails – Specifications

1 Scope

1.1 This East African Draft Standards specifies requirements, for preferred form and dimensions, tolerance on dimensions finish and surface coating, for the type of steel nails and of loose steel wire nails for general applications.

The types of nails are listed in 1.1.1 and 1.1.2.

NOTE: The nearest former s.w.g numbers are included in a separate column in each table for convenience only. They should not form part of the specification.

1.1.1 Wire nails include:

a) convex head roofing nails (chisel or diamond points);

b) pipe nails (chisel point);

c) hardboard panel pins (round shank);

d) hardboard panel pins (square shank);

e) lath nails;

f) plasterboard nails (jagged shank);

g) tile pegs;

h) tram nails with flat or raised head with chisel point;

i) square twisted shank flat head nails;

j) dowels;

k) tenter hooks;

l) annular ringed shanked flat head nails;

m) helical threaded shank flat head nails; and

n) duplex head nails.

o) Round checkered / plain head nails

1.1.2 Cut nails include:

a) cut clasp nails; and

b) cut floor brads

1.2 The following types of nails are illustrated in the diagrams accompanying tables 1-30:

a) round plain head nails;

b) round lost head nails;

c) clout or slate head nails;

d) extra-large head clout or felt nails;

e) panel pins;

f) oval brad head nails;

g) oval lost head nails;

h) spring head twisted shank nails; and

i) wash head slab nails.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specification and test methods*

ISO 2081, *Electroplated coatings of zinc on steel*

ISO 7989 (all parts), *Steel wire and wire products — Non-ferrous metallic coatings on steel wire*

ISO 16120 (all parts), *Non-alloy steel rod for drawing and/or cold rolling*

ISO 22034-2, *Steel wire and wire products — Part 2: Tolerances on wire dimensions*

3 Symbols

The following symbols apply to nails specified in this standard and are illustrated in Figure 1:

d - nominal characteristic dimension;

d_h - diameter of head;

l - nail length including head and point.

NOTE For spring head twisted shank nails the nail length, *l*, does not include the head.

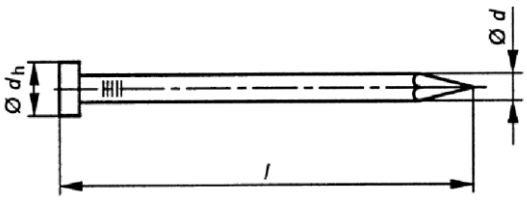


Figure 1 — Symbols for nails

4 Requirements

4.1 Materials and manufacture

Nails shall be produced from wire drawn from rods produced in accordance with ISO 16120. Nails produced in accordance with this standard shall not be subjected to heat treatment after fabrication except for that incurred during surface coating. Where heat treatment is applied after fabrication, the purchaser shall be informed.

The nails shall be manufactured from mild steel wire having a minimum tensile strength of 600 N/mm^2

Cut nails shall be made from black rolled steel.

4.2 Surface coating

The surface of the wire nails shall comply with one of the following:

a) uncoated; the surface of the nails shall be free from rust;

b) zinc coated or zinc alloy coated, with a minimum zinc purity of 98.5 % in the outer surface of the coating, by one of the following alternatives:

i) hot dipped to provide a minimum coating of 300 g/m^2 at an Acceptable Quality Level (AQL) of 10 %;

ii) barrel coated to provide a minimum coating of 300 g/m^2 at an AQL of 10 % of nails with nominal characteristic dimensions greater than 2.6 mm;

iii) electroplated zinc coatings in accordance with ISO 2081;

iv) iv) other zinc or zinc alloy coating methods such as sheradizing or mechanical zinc plating as agreed between purchaser and supplier;

c) lacquered, cement coated or phosphate coated.

4.3 Form and dimensions

4.3.1 General

The form and preferred dimensions are given in tables 1 to 29.

NOTE Other lengths having incremental steps usually of 5 mm are possible subject to agreement between purchaser and supplier.

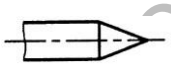
4.3.2 Nail point

The following types of nail points shall be used:

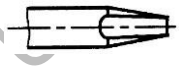
a) diamond point;

b) diamond point offset;

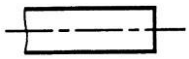
c) round point;



d) chisel point; and



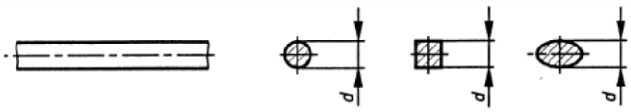
e) cut point.



4.3.3 Nail shank

The following forms of nail shank shall be used:

a) plain shank;

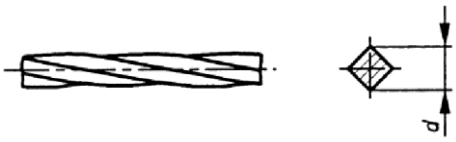


b) indented shank;

c) spiral rolled shank;

d) ring rolled shank;

e) twisted shank; and



f) grooved shank.

Nominal nail characteristic dimensions for indented, spiral rolled and ring rolled shanks are as for plain shank.

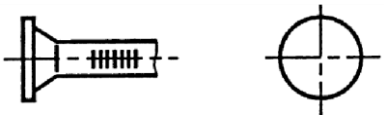
4.3.4 Nail head

The top surface of the nail head shall be smooth or chequered.

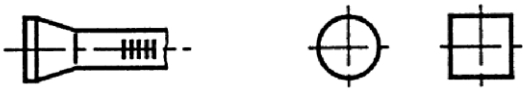
NOTE The top surface of the head may be marked by using raised or sunken letters, signs or numbers.

The following types of head shall be used:

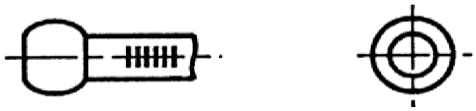
a) circular flat head;



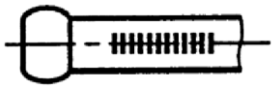
b) countersunk head;



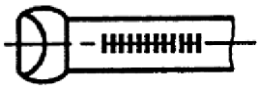
c) lost round head;



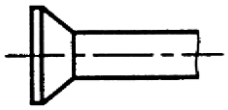
d) lost oval head;



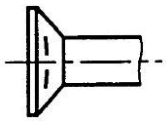
e) brad oval head;



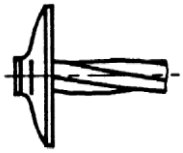
f) flat countersunk;



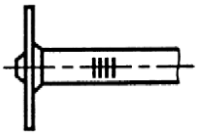
g) cup head;



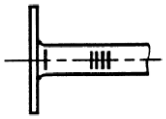
h) spring head;



i) washer head; and

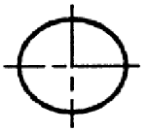


j) clout head.

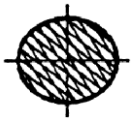


The following surface of the head may be smooth or chequered:

a) smooth head; and



b) chequered head.



4.4 Workmanship

Nails shall be straight and true in shape. The head and tip should conform to the different nail geometries referred in tables 1 – 28.

4.5 Finish

4.5.1 Oxidation

The surface of all nails shall be free from rust at the time of selling

To prevent oxidation nails shall be stored in dry place at all time.

4.5.2 Wire nails

The finish of wire nails shall be one of the following:

a) bright;

b) galvanized;

c) cement-coated (resin-coated); and

d) an alternative finish such as sherardized, cadmium plated or, as agreed between purchaser and supplier.

e) bright polished

f) Unpolished

4.5.3 Cut nails

The finish of cut nails shall be one of the following:

a) in the "as rolled" condition, except for those sides which are made bright by the cutting process; and b) galvanized.

4.5.4 Galvanizing

The coating of galvanized wire nails and galvanised cut nails shall comply with the requirements of ISO 1461 except the minimum coat weight shall be 300 g/m^2 at a maximum Acceptable Quality Level (AQL) of 10 %.

5 Dimensions and tolerances

5.1 General

The dimensions of nails shall be in accordance with tables 1 to 29, subject to the tolerances in 5.1 to 5.4.

5.2 Head diameter (d_h)

dh = d × 1.75 , where d is shank diameter in mm, except for extra-large head clout or felt nails which have a minimum of diameter of 11mm

5.3 Shank diameter (dimension *D*)

The following tolerances shall apply for:

a) round wire nails:

- when diameter is less than 2.65 mm, ± 2.5% mm; and
- when diameter is 2.65 mm and more, ± ± 2.5%mm;

b) cut nails:

- when not more than 50 mm in length, ± 2.5%mm;
- when over 50 mm and not more 100 mm in length, ± 2.5%; and when over 100 mm in length, ± 2.5%mm.

5.4 Length

The following tolerances shall apply for:

a) wire nails:

- when diameter is less than 2.65 mm, ± 2.5%; and
- when diameter is 2.65 mm and more, ± ± 2.5%mm;

b) cut nails:

- when not more than 50 mm in length, ± 2.5%mm;
- when over 50 mm and not more 100 mm in length, ± 2.5%mm; and
- when over 100 mm in length, ± 2.5%mm

5.5 Nominal characteristic dimension, *d*

The tolerance on the nominal characteristic dimension applies to the nail shank before coating.

6 Sampling and testing

6.1 Lot

In any consignment, all the packages of nails of the same type and size manufactured under essentially similar conditions shall be grouped together to constitute a lot

6.2 Selection of nails

One sample package shall be selected from five packages or part thereof up to a maximum of 10 samples. From each sample package, 125 g of nails or 50 nails, whichever is greater, shall be taken and form the bulk sample. From the bulk, 125 g of nails or 50 nails in the latter case shall be taken for the test.

6.3 Dimensional and visual characteristics

All samples shall be checked for the following requirements:

a) nominal length *L*
b) nominal shank diameter *d*
c) nominal head diameter d_h
d) eccentricity of head *e*
e) diamond point *s*
f) workmanship
g) freedom form burrs, cracks, flaws and other manufacturing defects
h) nail should be straight and true shape

When required by the purchaser, the coating weight of nails shall be tested in accordance with the gravimetric method in ISO 7989. The total area shall be taken as [total shank area + 2 (head area)].

7 Packaging and Marking

7.1 Nails of different sizes and types shall be packed in different containers.

7.2 Nails shall be supplied in any appropriate packing materials and the net mass of each bag shall be either 10kg, 25kg or 50kg. May also be packed in small packages containing 1 kg and 5 kg

7.3 The nominal net mass of each bag shall have a tolerance of ±1 %.

7.4 The marking on the package shall give the following:

a) manufacturer's name and trade mark, if any
b) type of nails
c) length of nails
d) net mass of the package
e) country of origin.

The nails shall be stored in dry place

8 Designation for ordering

8.1 When designating steel nails in an enquiry or an order, the following information shall be given:

a) quantity required by weight;

b) type of nail;

c) finish required;

d) length in millimetres;

e) diameter or dimension d in millimetres;

f) East Africa standard reference number.

g) nominal characteristic dimension;

h) type and surface of head;

i) type of shank;

j) type of point;

k) surface coatings.

Unless otherwise specified, nails with flat smooth circular heads, plain shanks and diamond points shall be supplied.

8.2 Examples of designating steel nails in an enquiry or an order include:

(a) 25 kg plasterboard nails jagged shank, galvanized, 40 mm x 2,65 mm, to DEAS 914:2018; and

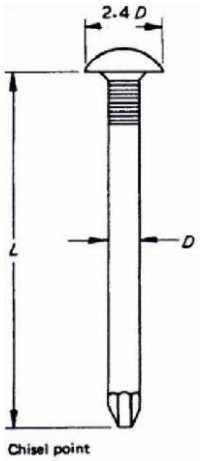
(b) 50 kg cut steel floor brads, 50 mm x 2.65 mm, to DEAS 914:2018.

9 Certificate of compliance

If required by the purchaser, the supplier shall certify that the nails comply with the requirements of this standard.

Table 1 — Dimensions and approximate count of convex roofing nails (chisel or diamond points)

Length L mm	Shank diameter D mm	Approx. no. of nails per kg	Nearest former s.w.g.
75	5.60	68	5
65	6.00	66	4
65	5.60	79	5



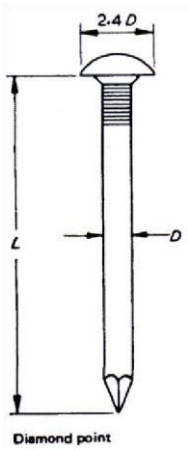


Table 2 — Dimensions and approximate count of convex roofing nails (chisel points)

Length *L* mm	Shank diameter *D* mm	Approx. no. of nails per kg	Nearest former s.w.g.
100	8.00	24	5/16
90	8.00	26	5/16
75	8.00	31	5/16
65	8.00	35	5/16
50	8.00	44	5/16

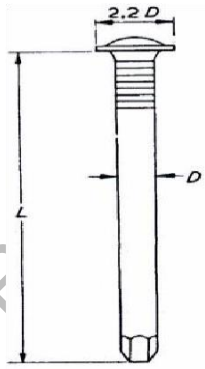


Table 3 — Dimensions and approximate count of hardboard panel pins (round shank)

Reference **Nail Ref**	**Length, *l***				**Shank Diameter ,*d***		**Head diameter,1.4 ×*d***	
	Inches	min. mm	nom. mm	Max.mm	Min. mm	Max. mm	Min. mm	Max. mm
MSPPN200	2	47.50	50	51.25	1.8	2	2.50	2.80
MSPPN 150	1 1/2	39.00	40	41.00	1.8	2	2.50	2.80
MSPPN 125	1 1/4	29.25	30	30.75	1.8	2	2.50	2.80
MSPPN100	1	24.38	25	25.63	1.7	1.9	2.30	2.60
MSPPN 75	3/4	19.50	20	20.50	1.6	1.8	2.20	2.50
MSPPN 75A	3/4	19.50	20	20.50	1.37	1.44	1.92	2.02

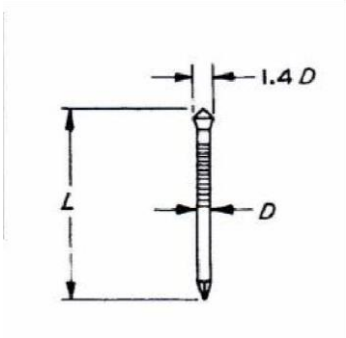


Table 4 — Dimensions and approximate count of hardboard panel pins (square shank)

Length L mm	Shank diameter D mm	Approx. no. of nails per kg	Nearest former s.w.g.
20	1.40	3 470	17

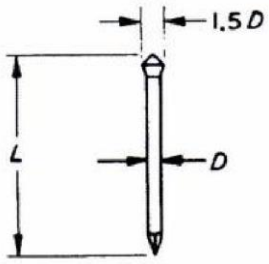


Table 5 — Dimensions and approximate count of lath nails

Length L mm	Shank diameter D mm	Approx. no. of nails per kg	Nearest former s.w.g.
40	2.00	970	14
30	2.00	1 170	14
25	2.00	1 430	14
25	1.80	1 740	15
25	1.60	2 140	16
20	1.80	1 750	15
20	1.60	2 370	16

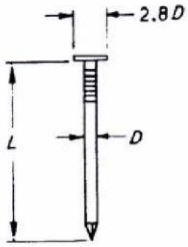


Table 6 — Dimensions and approximate count of plasterboard nails (Jagged shank)

Length L mm	Shank diameter D mm	Approx. no. of nails per kg	Nearest former s.w.g.
40		570	12
30	2.65	700	12
	2.65		

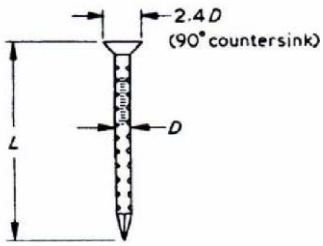


Table 7 — Dimensions and approximate count of tile pegs

Length L mm	Shank diameter D mm	Approx. no. of nails per kg	Nearest former s.w.g.
40		88	4
30	6.00	106	4
	6.00		

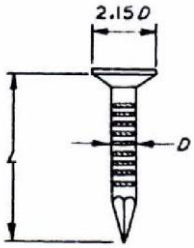


Table 8 — Dimensions and approximate count of tram nails with flats or raised head and chisel point

Length *L* mm	Shank diameter *D* mm	Approx. no. of nails per kg	Nearest former s.w.g.
65	8.00	37	5/16

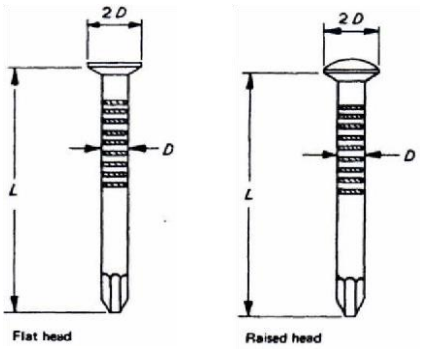
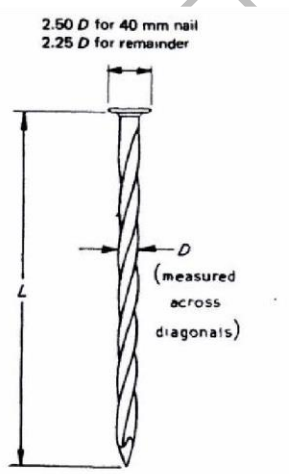


Table 9 — Dimensions and approximate count of squared twisted shank flat head nails

Length *L* mm	Shank diameter *D* mm	Approx. no. of nails per kg	Nearest former s.w.g.
65	3.35	235	10
50	3.00	415	11
50	2.65	515	12
40	2.36	860	13



NOTE Because of the square twisted shank, the shape of the head will differ from that of a round wire nail.

Table 10 — Dimensions and approximate count of dowels

Length *L* mm	Shank diameter *D* mm	Approx. no. of nails per kg	Nearest former s.w.g.
50	2.65	455	12
45	2.65	520	12
40	2.65	610	12

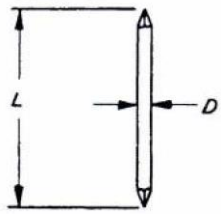


Table 11 — Dimensions and approximate count of tenterhooks

Length *L* mm	Shank diameter *D* mm	Approx. no. of nails per kg	Nearest former s.w.g.
25	2.36	690	13
20	2.36	740	13

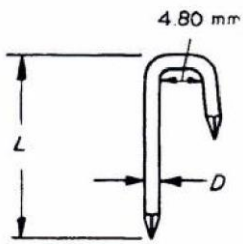
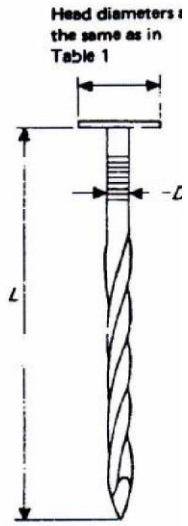


Table 12 — Dimensions and approximate count of annular ringed shank flat head nails

Table 13 — Dimensions and approximate count of helical threaded shank flat head nails

Length *L* mm	Shank diameter *D* mm	Approx. no. of nails per kg	Nearest former s.w.g.
200	8.00	13	5/16
180	6.70	22	3
150	6.00	29	4
125	5.60	35	5
115	5.00	57	6
100	5.00	66	6
90	4.00	106	8
90	3.75	123	9
90	3.35	152	10
75	4.00	121	8
75	3.75	154	9
75	3.35	194	10
65	3.75	175	9
65	3.35	230	10
65	3.00	275	11
60	3.35	255	10
60	3.00	310	11
60	2.65	385	12
50	3.35	290	10
50	3.00	340	11
50	2.65	440	12
45	2.65	510	12
40	2.65	575	12



Length *L* mm	Shank diameter *D* mm	Approx. no. of nails per kg	Nearest former s.w.g.
200	8.00	13	5/16
180	6.70	22	3
150	6.00	29	4
125	5.60	35	5
115	5.00	57	6
100	5.00	66	6
90	4.00	106	8
90	3.75	123	9
90	3.35	152	10
75	4.00	121	8
75	3.75	154	9
75	3.35	194	10
65	3.75	175	9
65	3.35	230	10
65	3.00	275	11
60	3.35	255	10
60	3.00	310	11
60	2.65	385	12
50	3.35	290	10
50	3.00	340	11
50	2.65	440	12
45	2.65	510	12
45	2.36	640	13
40	2.65	575	12
40	2.36	750	13
30	2.36	840	13
30	2.00	1 170	14
25	2.00	1 430	14
20	2.00	1 900	14

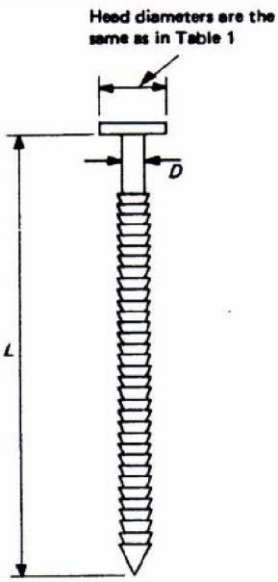


Table 14 — Dimensions and approximate count of duplex head nail

Length L mm	Shank diameter D mm	Lower head diameter	Approx. no. of nails per kg	d mm	Nearest former s.w.g.
100	5.60	11.00	46	9.50	
90	5.00	9.50	62	9.50	5
75	4.00	8.50	100	9.50	6
70	3.75	8.00	130	8.00	8
60	3.35	7.00	200	6.50	9
45	3.00	6.50	345	6.50	10
					11

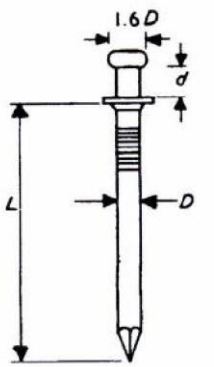


Table 15 — Dimensions and approximate count of cut clasp nails

Length L mm	Shank dimension D mm	Approx. no. of nails per kg	Nearest former s.w.g.
200	6.00	11	4
175	5.60	13	5
150	5.60	19	5
125	5.00	30	6
100	4.00	48	8
90	3.75	66	9
75	3.35	103	10
65	3.00	171	11
60	2.65	202	12
50	2.65	286	12
40	2.00	616	14
30	1.80	858	15
25	1.60	1 384	16

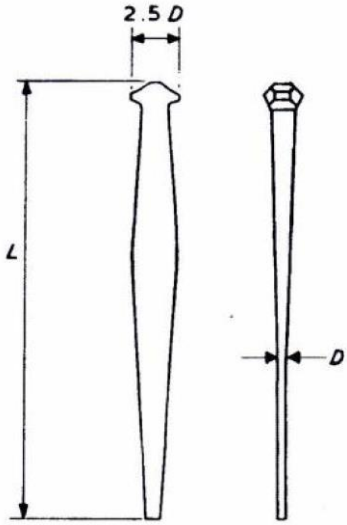
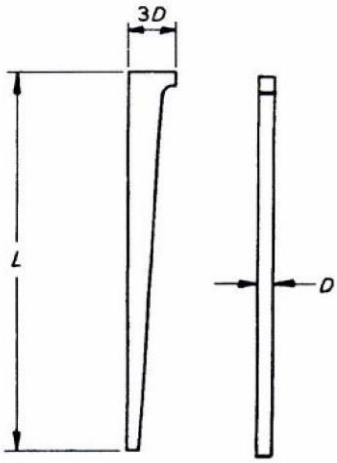


Table 16 — Dimensions and approximate count of cut clasp nails

Length L mm	Shank dimension D mm	Approx. no. of nails per kg	Nearest former s.w.g.
75	3.35	100	10
65	3.35	154	10
60	3.00	198	11
50	2.65	264	12
45	2.36	330	13
40	2.36	396	13

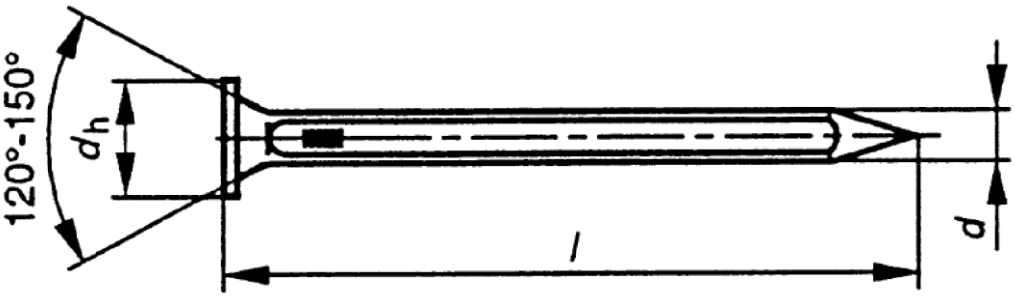


Side views

in shank nails

Nail reference	NOMINAL WIRE DIAMETER ± 2.5% mm	NOMINAL LENGTH mm ± 2.5%	MINIMUM HEAD DIAMETER d×1.75 mm
MSN 1″	1.90	25.4	3.15
MSN 1 1/2″	2.35	38.1	3.85
MSN 2″	2.90	50.8	4.73
MSN 2 1/2″	3.45	63.5	5.78
MSN 3″	3.95	76.2	6.65
MSN 4″	4.55	101.6	7.53
MSN 5″	5.35	127	9.10
MSN 6″	5.85	150.4	9.98
KEY MSN represents mild steel nail MM represents dimensions in millimeters			

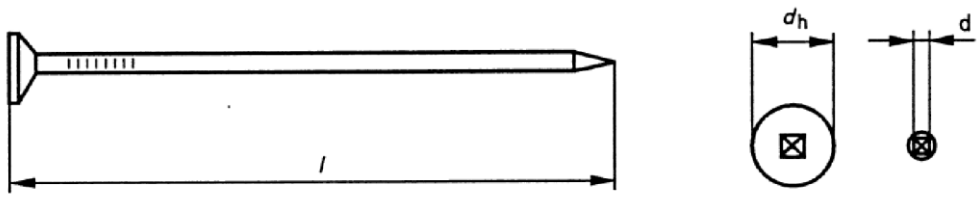
Table 18 — Dimensions for circular, flat and flat countersunk head, grooved shank nails



Dimensions in mm

Nominal characteristic dimension *D*	1,4	1,6	1,8	2,0	2,2	2,4	2,7	3,0	3,4	3,8	4,2	4,6	5,0	5,5	6,0	7,0	8,0
Nail Length *L*	20																
	25																
	30	30	30														
		35	35														
		40	40	40													
				50	50	50											
					60	60	60	60	60								
							70	70	70	70							
							80	80	80	80							
								90	90	90	90	90					
									100	100	100	100	100				
										110	110						
										120	120	120	120				
											130						
												140	140	140			
													150		150		
															160		
														170			
															180		
															200	200	
																220	
																250	
																	280
																	300
Head diameter d_h	3,2	3,6	4,0	4,5	5,0	5,5	5,9	6,8	7,7	7,7	8,4	9,2	10	11	12	14	16

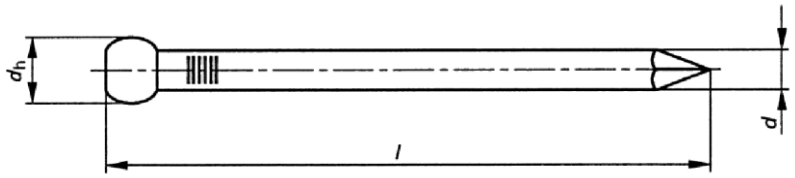
Table 19 — Dimensions for circular, flat and flat countersunk head, square shank nails



Dimensions in mm

Nominal characteristic dimension d	1,0	1,2	1,4	1,6	1,7	1,8	2,0	2,2	2,5	2,8	3,1	3,4	3,8	4,2	4,6	4,8	5,5	6,0	7,0
Nail length l	15	20	25 35	25 35	30 35 40	35 40	40 50	45 50 55	55 60 65	65 75 90	80	90 95 100	100 125	125	130	150	160 175 200	180 190	210 260
Head diameter d_h	2,5	3,0	3,5	4,0	4,3	4,5	5,0	5,5	6,3	7,0	7,8	8,5	9,5	10,5	11,5	12,0	13,8	15,0	17,5

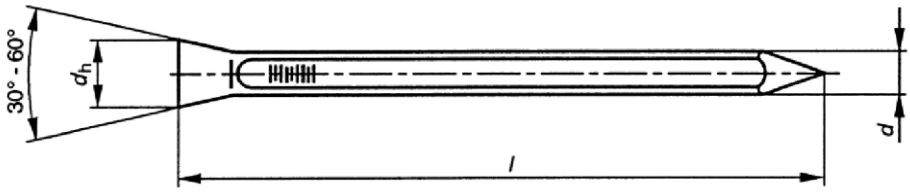
Table 20 — Dimensions for lost round head, plain shank nails



Dimensions in mm

Nominal characteristic dimension d	1,0	1,2	1,4	1,6	1,8	2,0	2,2	2,4	2,7	3,0	3,4	3,8	4,2	4,6	5,0
Nail length l	10	15	20 25	25 30	30 40	30 40 45	30 40 50	30 40 50	40 50 60	50 60 70 80	60 70 80 90	70 80 90 100	90 100 110	90 100 120	100 120 140
Head diameter d_h	1,4	1,7	2,0	2,2	2,5	2,8	3,1	3,4	3,8	4,2	4,8	5,3	5,9	6,4	7,0

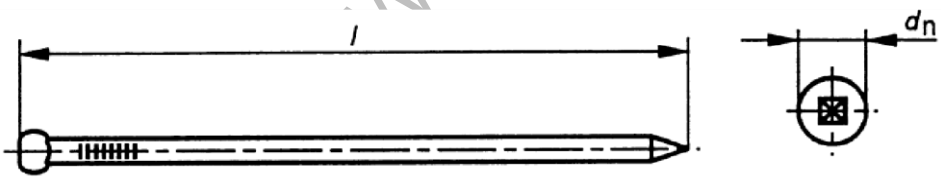
Table 21 — Dimensions for lost round head, grooved shank nails



Dimensions in mi

Nominal characteristic dimension d	1,4	1,6	1,8	2,0	2,2	2,4	2,7	3,0	3,4	3,8	4,2	4,6	5,0
Nail length l	20 25 30	30 35 40	30 35 40	40 50	50 60	50 60	60 70 80	60 70 80 90	60 70 80 90 100	70 80 90 100 110 120	90 100 110 120 130	90 100 120 140	100 120 140 150
Head diameter d_h	2,0	2,2	2,5	2,8	3,1	3,4	3,8	4,2	4,8	5,3	5,9	6,4	7,0

Table 22 — Dimensions for lost round head, plain shank nails

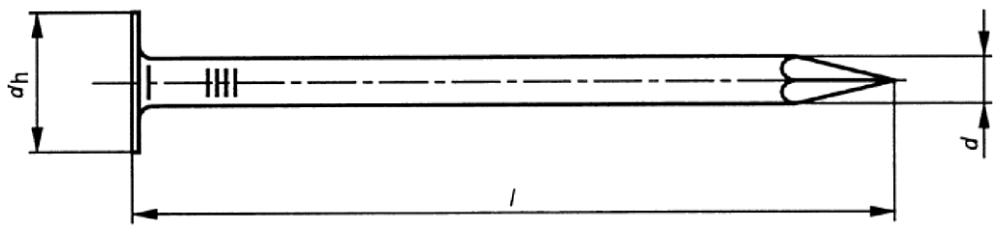


Dimensions in mm

Nominal dimension d	1,0	1,2	1,4	1,6	1,7	1,8	2,0	2,2	2,5	2,8	3,1	3,4	3.8	4,2
Nail length l	15	20	25 35	25 35	30 35 40	35 40	40 50	45 50 55	55 60 65	65 75 90	80	90 95 100	100 125	125
Head diameter d_h	2,5	3,0	3,5	4,0	4,3	4,5	5,0	5,5	6,3	7,0	7,8	8,5	9,5	10,5

Table 23 — Dimensions for clout head, plain shank nails

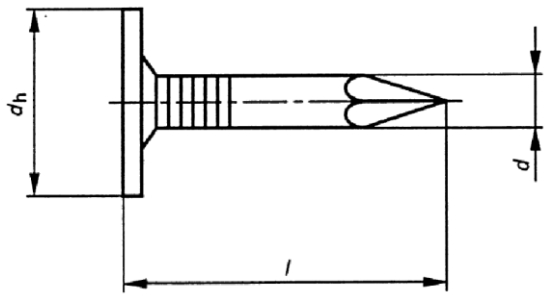
Nominal diameter the tolerance to be taken as ± 2.5% and head diameter to be calculated as $d_h = d \times 1.75$



Dimensions in mm

Nominal characteristic dimension *d*	2,2	2,4	2,7	3,0	3,4	3,8	4,6
Nail length *l*	20 25 30< 40	 25 30 35 40 45 50	20 25 30 40 50 65	 30 40 50	 40 45 50	 50 65 75	 100
Head diameter d_h	7,3	7,9	8,9	9,9	11,2	11,8	13,1

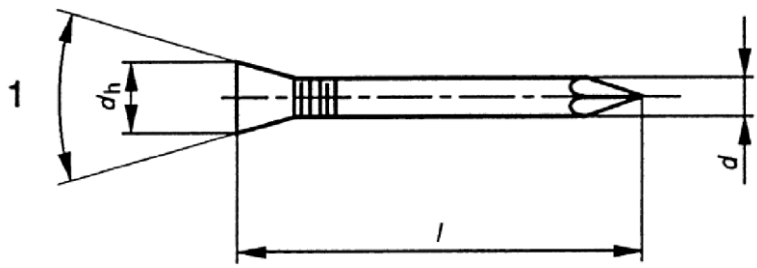
Table 24 — Dimensions for extra-large clout head nails



Dimensions in mm

Nominal characteristic dimension *d*	2,0	2,2	2,4	2,7	3,0
Nail length *l*	 20	 20 25 30	 20 25	 20 25 30 35 40 50 60	15 20 25 30 35 40 50
Head diameter d_h	≥ 7,5	≥ 7,7	≥ 8,4	≥ 9,4	≥ 11

Table 25 — Dimensions for countersunk panel pin head, plain shank nails

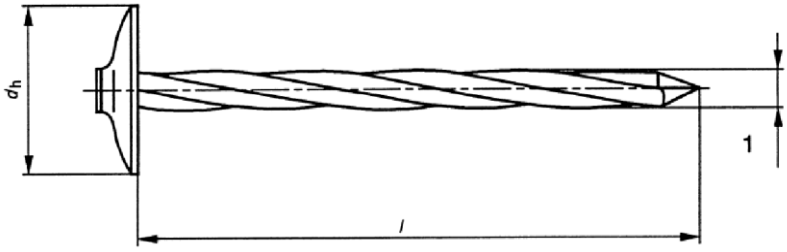


1. 32° included angle

Dimensions in mm

Nominal characteristic dimension *d*	1,0	1,4	1,6	1,8
Nail length *l*	15	20 25 30	20 30 40	20 25 30 40
Head diameter d_h	1,4	2,0	2,2	2,5

Table 26 — Dimensions for springhead, square twisted shank nails

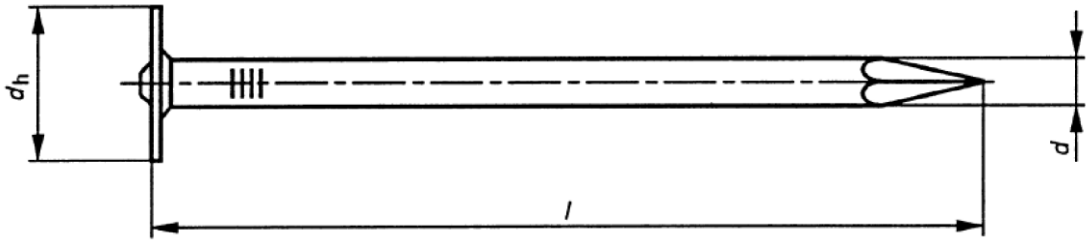


1) *d* measured over the diagonals

Dimensions in mm

Nominal characteristic dimension *d*	3,4	3,8
Nail length *l*	50 60 70 75 80 100	50 60 70 75 80 90 100
Head diameter d_h	≥ 18	≥ 18
NOTE. The nail length is measured under the head.		

Table 27 — Dimensions for washer head plain shank nails

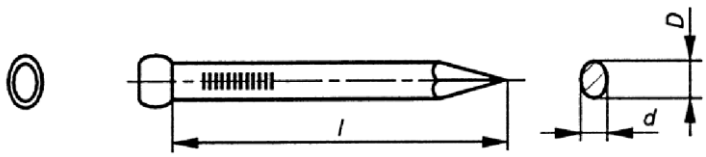


Dimensions in mm

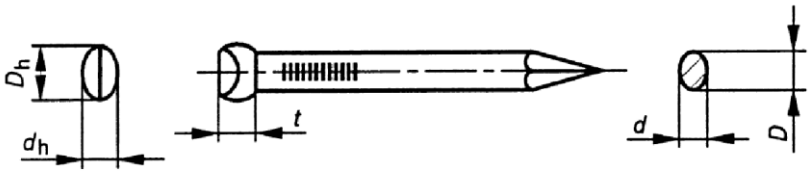
Nominal characteristic dimension d	3,0	3,4
Nail length l	40 50 60	 70 80 90 100
Head diameter d_h	≥ 18	≥ 18
NOTE. The heads are usually manufactured by using plain washers but other shapes are permitted.		

Table 28 — Dimensions for lost oval head and brad oval head oval plain shank nails

Lost oval head



Brad oval head



Dimensions in mm

Nominal characteristic dimensions											
	d	1,2	1,6	2,0	2,4	2,7	3,4	3,8	4,2	4,6	5,0
	D	2,0	2,7	3,4	3,8	4,2	5,0	5,5	6,0	6,5	7,0
Nail length *l*		20									
		25									
			30								
			40								
				45							
				50							
					60						
						65					
							75				
								90			
									100		
										125	
											150
Head diameter											
d_a 1,6*d*		1,9	2,6	3,2	3,8	4,3	5,4	6,1	6,7	7,4	8,0
D_a 1,4*D*		2,8	3,8	4,8	5,3	5,8	7,0	7,7	8,4	9,1	9,8

Table 29 — Dimensions for U- nails

Length, L		Shank diameter, d		Dimension, E	
Nominal (mm)	**Tolerance (%)**	**Nominal (mm)**	**Tolerance (%)**	**Nominal (mm)**	**Tolerance (mm)**
25	± 2.5	2.7	± 2.5	11	1
32	± 2.5	3.5	± 2.5	11	1
40	± 2.5	3.5	± 2.5	11	1
40	± 2.5	3.8	± 2.5	11	1
50	± 2.5	3.8	± 2.5	11	1

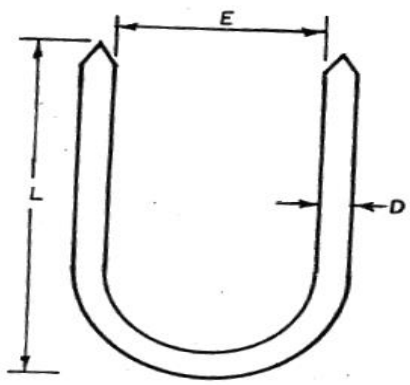


Table 30: Dimension for round checkered/plain head nails

Length L (mm)	Shank Dia D (mm)	Head dia. D (mm)
25.4	2	5
38.1	2.5	5.9
50.8	3	6.8
63.5	3.5	7.7
76.2	4	8.4
101.6	5	10
127	5.5	11
152.4	5.9	12

Tolerances: Nail length = ±1mm, **Shank diameter** = diameter less than 2.65mm it's± 0.03mm. When diameter is more than 2.65 its ±0.05mm