

ISD DUNAFERR PRODUCT CATALOGUE

COLD ROLLED PRODUCTS HOT ROLLED PICKLED PRODUCTS

1. STEEL GRADES

With regard to standards, the specifications of the standards of the latest issue date are valid. Mechanical properties and chemical composition in the tables are valid by taking into account the supplementary specifications of the indicated standards.

1.1. Cold rolled wide and slit strips and sheets

1.1.1. Cold rolled unalloyed mild steel for cold-forming

Typical fields of application: die forming or small and medium scale deep drawing (DC 01-DC 03), or production of specially deep-drawn and complex parts (DC 04-DC 05).

Standard designation EN 10130	Designation of superseded or other standards			
	EN 10130	DIN 1623 T1	ASTM A568/A568M	JIS G 3141
DC 01*	FePO1*	St 12*	A 366 (SAE 1010)	SPCC
DC 03	FePO3	RRSt 13	A 619 (SAE 1008)	SPCD
DC 04	FePO4	St 14	A 620 (SAE 1006)	SPCEN
DC 05	FePO5	—	—	—

The * marked grade can be produced of two steel types: Al-killed (DC 01 Al, FePO1 Al, RSt 12) and Si- and Al-semikilled.

Specification of mechanical properties* and chemical composition according to the EN 10130.

Grade EN 10130	R _e max*, N/mm ²	R _m N/mm ²	A ₈₀ min.* %	r ₉₀ min.	n ₉₀ min.	Chemical composition max. %			
						C	P	S	Mn
DC 01	280	270–410	28	—	—	0.12	0.045	0.045	0.60
DC 03	240	270–370	34	1.3	—	0.10	0.035	0.035	0.45
DC 04	210	270–350	38	1.6	0.180	0.08	0.030	0.030	0.40
DC 05	180	270–330	40	1.9	0.200	0.06	0.025	0.025	0.35

* Mechanical properties are depending on the thickness.

The above grades may be ordered as rolled and hard rolled products with full hard mechanical properties for continuous hot-dip galvanising.

1.1.2. Cold re-rolled grades for providing a specified tensile strength

Typical fields of application: bending, punching, production of tubes, supporting structure for industrial and commercial shelves, etc.

Standard designation EN 10139	Comparison of superseded standard designations DIN 1624
DC 01 C 290	St 2 K 32
DC 01 C 340	St 2 K 40
DC 01 C 390	St 2 K 40
DC 01 C 440	St 2 K 50
DC 01 C 490	St 2 K 50
DC 01 C 590	St 2 K 60
DC 01 C 690	St 2 K 70
DC 03 C 290–C 590*	RR St 3 K 32–K 60*
DC 04 C 290–C 590*	St 4 K 32–K 60*

* The steel grades of the fully killed DC03 and DC04, RRSt 3 and St 4 group are given without the listing of the intermediate steel grades.

Specification of the mechanical properties and chemical composition can be found at the C 290–C 690 grade group of the standard EN 10139.

Grade	R_e	R_m	A_{80} min.	Chemical composition max.			
	N/mm ²	N/mm ²	%	%			
DC 01				C	P	S	Mn
C 290	200–380	290–430	18	0.12	0.045	0.045	0.60
C 340	min. 250	340–490	—				
C 390	min. 310	390–540	—				
C 440	min. 360	440–590	—				
C 490	min. 420	490–640	—				
C 590	min. 520	590–740	—				
C 690	min. 630	min. 690	—				

1.1.3. Cold rolled unalloyed and alloyed electrotechnical steel sheet and strip in semi finished condition for the production of magnetic cores of rotors and stators of electric motors and for other magnetic circuits (e.g. relays, chock coil cores, etc.)

Magnetic properties of an Al killed steel according to the EN 10341.

Standard designation EN 10341	Standard designation EN 10126	Nominal thickness	Maximum total specific magnetic loss	Minimum magnetic polarisation		
		mm	W/kg	T min.		
			at 50 Hz and 1.5T	2500	5000	10 000
M450-50K	M450-50E	0.50	4.5	1.57	1.65	1.75
M660-50K	M660-50D		6.60	1.62	1.70	1.79
M890-50K	M890-50D		8.90	1.60	1.68	1.78
M1050-50K	M1050-50D		10.50	1.57	1.65	1.77
M800-65K	M800-65D	0.65	8.00	1.62	1.70	1.79
M1000-65K	M1000-65D		10.00	1.60	1.68	1.78

On request, we also produce semi finished electro-technical steel strips produced from steels with increased Si and P content.

The directive mechanical properties and surface roughness.

R_m N/mm ²	R_p / R_m min.	A_{80} min. %	HV 5 —	R_s μm min.
350–410	0.85	20	120–170	1.5

1.1.4. Cold rolled unalloyed mild steel for conventional enamelling

Typical field of application: production of dishes, sinkbowl, boilers, kitchen stoves, gas heaters and other household appliances.

Standard designation EN 10209	Superseded standard designation DIN 1623 T3
DC 01 EK	EK 2
DC 04 EK*	EK 4*

* In case of thickness below 0.8 mm we offer the DC EK-B quality developed by ISD Dunafer Co. Ltd., a Boron-alloyed product with good enamelling and forming properties.

Specification of mechanical properties and chemical composition for grades according to EN 10209.

Grade	R_e max. N/mm ² *	R_m N/mm ²	A_{80} min. %*	Chemical composition C max. %
DC 01 EK	270	270–390	30	0.08
DC 04 EK	220	270–350	36	0.08

* Mechanical properties are depending on the thickness.

Hydrogen transmitting ability: $TH = t_0 / d^2$,
where:

t_0 = penetration time of hydrogen (min),
 d = material thickness (mm).

Enamelability is correct if $TH \geq 6.7$

Directive mechanical properties in the case of boric microalloyed grades are the following.

R_p , N/mm ²	R_m , N/mm ²	A_{90} , %
200–215	280–340	min. 36

Testing of hydrogen penetration ability is not requested for boric microalloyed grades, enamellability is guaranteed by the production process. The TH value included by the Quality Certificate is for information purposes only.

1.1.5. General purpose constructional steel

Typical fields of application: construction, welded structures, production of die formed parts, cold-formed sections and tubes. These grades are supplied also on the basis of the ÜHP certificate of company LGA.

Specification of mechanical properties and chemical composition for grades according to DIN 1623 T2.

Grade	R_s min. N/mm ²	R_m , N/mm ²	A_{90} min. %	Chemical composition max. %			
				C	P	S	N
St 37–2G*	215	360–510	20	0.17	0.040	0.035	0.009
St 37–3G*	215	360–510	20	0.17	0.040	0.035	—
St 44–3G*	245	430–580	18	0.20	0.040	0.035	—
St 52–3G*	325	510–680	16	0.20	0.040	0.035	—
St 50–2G	295	490–660	14	0.40	0.050	0.050	0.009

* Bend testing is a mechanical requirement.

The above grades are produced as hard rolled products as well for galvanising purposes.

1.1.6. Cold rolled steel grades resistant to atmospheric corrosion

Fields of application: supporting and facing elements of exterior surfaces exposed to climatic effects, production of sea-fast containers, etc.

The production of these grades is of hot rolled base material with the chemical composition and mechanical properties according to the standards listed in the table below, the cold-rolling process being regulated by factory standards.

Standard designations	
EN 10155	DASZ 210*
S 235 JOW S 235 J2W	—
—	D-COR-TEN 410
S 355 JOW S 355 J2G2W	—

* factory standard

Chemical composition and mechanical properties according to DASZ 210.

Grade	Chemical composition %								R_{eH} min.	R_m	A_{90}
	C max.	Si max.	Mn	P max.	S max.	Al max.	Cr	Cu	N/mm ²	N/mm ²	min.%
D-COR-TEN-410	0.090	0.600	0.400	0.120	0.020	0.060	0.700	0.550	275	410-530	25

1.1.7. Microalloyed high-strength structural steel grades for cold-forming

Typical fields of application: production of pressed parts (automotive industry), special sections and tubes of specified strength.

Standard designation	Superseded standard designation	Analogue standard designation
EN 10268	EN 10268	SEW 093
HC260LA	H 240 LA	ZStE 260
HC300LA	H 280 LA	ZStE 300
HC340LA	H 320 LA	ZStE 340
HC380LA	H 360 LA	ZStE 380
HC420LA	H 400 LA	ZStE 420

Specification of the chemical composition according to EN 10268.

Grade	Chemical composition %								
	C max.	Si max.	Mn max.	P max.	S max.	Al min.	Nb max.	Ti max.	Nb+Ti+V max.
HC260LA	0.10	0.50	0.6	0.025	0.025	0.015	0.090	0.15	0.220
HC300LA	0.10	0.50	1.0	0.025	0.025	0.015	0.090	0.15	0.220
HC340LA	0.10	0.50	1.1	0.025	0.025	0.015	0.090	0.15	0.220
HC380LA	0.10	0.50	1.6	0.025	0.025	0.015	0.090	0.15	0.220
HC420LA	0.10	0.50	1.6	0.025	0.025	0.015	0.090	0.15	0.220

Specification of the mechanical properties according to EN 10268.

Grade	R _{p0.2} N/mm ²	R _m N/mm ²	A _{50 min.} %	R _{p0.2} N/mm ²	R _m N/mm ²	A _{50 min.} %
	transversal			longitudinal		
HC260LA	260–330	350–430	26	240–310	340–420	27
HC300LA	300–380	380–480	23	280–360	370–470	24
HC340LA	340–420	410–510	21	320–410	400–500	22
HC380LA	380–480	440–560	19	360–460	430–550	20
HC420LA	420–520	470–590	17	400–500	460–580	18

1.2. Hot rolled pickled wide and narrow strips and sheets

Supply of these products is subject to special agreement.

1.2.1. Hot rolled unalloyed mild steel

Standard designation	Analogue superseded standard designation
EN 10111	DIN 1614 T2
DD 11	StW 22
DD 12	RRStW 23
DD 13	StW 24
DD 14	—

1.2.2. General purpose constructional steel

According to EN 10025 and DIN 17100-80 standards.

EN10025+A1:93*	DIN 17100-80
S235JR	St 37-2
S235JRG1	USt 37-2
S235JRG2	RSt 37-2
S235J0	—
S235J2G3	St 37-3
S235J2G4	—
S275JR	St 44-2
S275J0	—
S275J2G3	St 44-3
S275J2G4	—
S355JR	—
S355J0	—
S355J2G3	St 52-3

* Standard preferred by the producer
Si subject to agreement

1.2.3. Enamellable steel grades according to special agreement and steel grade FeP13-B according to DASZ 206* standard

* factory standard

Grade	R _{e max.} N/mm ²	R _{m max.} N/mm ²	A _{5 min.} %	Chemical composition %						
				C max.	Si max.	Al min.	Al max.	Cu max.	B min.	B max.
DASZ 206										
FeP13-B	270	360	44	0.050	0.03	0.02	0.06	0.030	0.002	0.004

1.2.4. Microalloyed steel grades

According to standards EN 10149-2 and SEW 092.

SEW 092	EN 10149-2
—	S315MC
QStE 260 N	—
QStE 340 N	—
QStE 340 TM	S355MC
QStE 380 N	—
QStE 380 TM	—
QStE 420 TM	S420MC
QStE 460 TM	S460MC

1.2.5. Hot rolled pickled steel strips for welded gas bottles

According to EN 10120.

Grade	Chemical composition %							R _{eH} min. N/mm ²	R _m N/mm ²
	C max.	Si max.	Mn min.	P max.	S max.	Al ösz. min.	N max.		
P245NB	0.16	0.25	0.30	0.025	0.015	0.020	0.009	245	360-450
P265NB	0.19	0.25	0.40	0.025	0.015	0.020	0.009	265	410-500
P310NB	0.20	0.50	0.70	0.025	0.015	0.020	0.009	310	460-550
P355NB	0.20	0.50	0.70	0.025	0.015	0.020	0.009	355	510-620

2. FINISHING

2.1. Our cold rolled and hot rolled pickled products may be ordered skin-passed and stretch-levelled as well.

- In case of skin-passed product the thickness shall be maximum 3 mms.
- In case of stretch-levelled products the thickness shall be maximum 1.25 mm.

2.2. Edges:

- hot rolled edges
- cold rolled edges
- cut edges

3. SURFACE

3.1. Surface qualities per steel grades according to the specifications of different standards

Steel grades	Surface quality					
	EN 10130		DIN 1623 T1		EN 10139	
Mild steel	A	B*	O3	O5*		
Re-rolled steel grades					MA	MB*
Mild steels for enamelling	A		O3			
Alloyed and unalloyed semi-finished electro-technical steel	According to product standard.					
Cold rolled constructional steel						
Cold rolled steel grades resistant to atmospheric corrosion						
Hot rolled pickled constructional steel						
Hot rolled pickled and tempered steel grades						
Hard rolled steel grades						

Recommended surface types by application purposes for cold rolled steel grades:

- spray lacquering and galvanising: B, O5, MB
- enamelling in two layers, electrophoretic painting, powder painting: A, O3, MA
- electrolytic surface finishing: A, O3

* supply is subject to special agreement

3.2. Surface roughness of cold rolled products

According to the types specified in the order:

Average roughness	Denomination	Designation
$Ra = < 0.90 \mu\text{m}$	semi-bright (glatt)	g
$0.60 < Ra = < 1.90 \mu\text{m}$	mat	m
$Ra > 1.60 \mu\text{m}$	rough	r

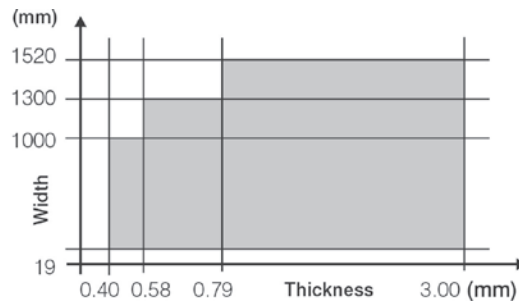
When otherwise not specified, the products are supplied with a mat surface, with the exception of re-rolled and hard grades, where the supplied surface quality is semi-bright (glatt).

4. SUPPLIED SIZES

4.1. Cold rolled wide and slit (narrow) strips

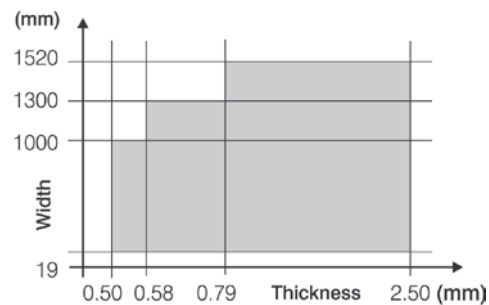
4.1.1. Steel grades

- mild steels (DC 01, DC 03, and grades according to other standards),
- constructional steels (St 37-2G, St 37-3G and grades according to other standards),
- unalloyed and alloyed electrotechnical steels (0.50–1.00 mm),
- re-rolled steel grades,
- hard rolled steel grades.
- microalloyed steels up to a max. strength of 380 N/mm².



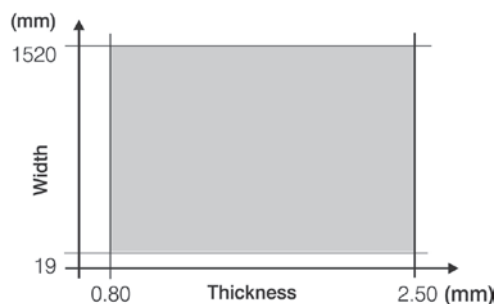
4.1.2. Steel grades DC 04 és DC 05

Mild steels DC 04 and DC 05 or analogue grades of other standards.



4.1.3. Steel grades

- constructional steels St 44-3G, St 52-3G and analogue grades of other standards,
- microalloyed steels H 400 LA, HC 420 LA.



4.1.4. Steels for enamelling

Maximum thickness:

for grade DC 01 EK: 2.50 mm

for grade DC 04 EK: 2.50 mm

Width is according to point 4.1.1.

4.2. Cold rolled sheets

Thickness h (mm)	Width b (mm)			
	555 ≤ b ≤ 800	800 < b ≤ 1000	1000 < b ≤ 1300	1300 < b ≤ 1520
	Length (mm)			
0,40 ≤ h < 0,58	700–3200	700–3200	—	—
0,58 ≤ h < 0,80	700–3200	700–3200	700–3200	—
0,80 ≤ h < 2,50	700–3200	700–3200	700–3200	700–3200

Note:

Sheets above 2.1 thickness are supplied only with edge trimmed finish done during the pickling process.

4.3. Hot rolled pickled wide coil

Thickness h (mm)	Width b (mm)
1,2 ≤ h < 1,8	800–1220
1,8 ≤ h < 2,5	800–1300
2,5 ≤ h ≤ 6,0	800–1520

4.4. Hot rolled pickled slit strip

Thickness h (mm)	Width b (mm)
1,2 ≤ h ≤ 4,00	min.: 19 mm

4.5. Hot rolled pickled sheets

Cut to length in cold rolling mill

Thickness h (mm)	Width b (mm)		
	800 < b ≤ 1000	1000 < b ≤ 1300	1300 < b ≤ 1500
	Length (mm)		
1,20 ≤ h < 2,00	800–3200	800–3200	—
2,00 ≤ h < 2,50	800–3200	800–3200	800–3200
2,50	800–3200	800–3200	800–3200

Note:

Sheets above 2.1 thickness are supplied only with edge trimmed finish done during the pickling process.

Cut to length in hot rolling mill

Thickness h (mm)	Width b (mm)	Length l (mm)
2,51 ≤ h ≤ 6,00	800–1540	1750–3200

Note:

Sheets above 2.1 mm thickness are supplied only with edge trimmed finish done during the pickling process.

5. DIMENSION TOLERANCES

The tolerances for dimensions are according to the specifications of the standard EN 10131 for mild steels.

5.1. Thickness tolerance

Nominal thickness h (mm)	Standard tolerances nominal width b (mm)		Reduced tolerances nominal width b (mm)	
	b ≤ 1200	1200 < b ≤ 1500	b ≤ 1200	1200 < b ≤ 1500
0.35 ≤ h ≤ 0.40	± 0.03	± 0.04	± 0.020	± 0.025
0.40 < h ≤ 0.60	± 0.03	± 0.04	± 0.025	± 0.030
0.60 < h ≤ 0.80	± 0.04	± 0.05	± 0.030	± 0.035
0.80 < h ≤ 1.00	± 0.05	± 0.06	± 0.035	± 0.040
1.00 < h ≤ 1.20	± 0.06	± 0.07	± 0.040	± 0.050
1.20 < h ≤ 1.60	± 0.08	± 0.09	± 0.050	± 0.060
1.60 < h ≤ 2.00	± 0.10	± 0.11	± 0.060	± 0.070
2.00 < h ≤ 2.50	± 0.12	± 0.13	± 0.080	± 0.090
2.50 < h ≤ 3.00	± 0.15	± 0.15	± 0.100	± 0.110

Percentage increase of thickness tolerance for the flat products made of high-strength structural steels are increased in four steps between <260 to <420 N/mm².

5.1.2. Width tolerance

Nominal width b (mm)	Nominal thickness h (mm)	Width tolerance*	
		Standard	Reduced
b < 125	h < 0.6	+ 0.4	+ 0.2
	0.6 ≤ h < 1.0	+ 0.5	+ 0.2
	1.0 ≤ h < 2.0	+ 0.6	+ 0.3
	2.0 ≤ h ≤ 3.0	+ 0.7	+ 0.4
125 ≤ b < 250	h < 0.6	+ 0.5	+ 0.2
	0.6 ≤ h < 1.0	+ 0.6	+ 0.3
	1.0 ≤ h < 2.0	+ 0.8	+ 0.4
	2.0 ≤ h ≤ 3.0	+ 1.0	+ 0.5
250 ≤ b < 400	< 0.6	+ 0.7	+ 0.3
	0.6 ≤ h < 1.0	+ 0.9	+ 0.4
	1.0 ≤ h < 2.0	+ 1.1	+ 0.5
	2.0 ≤ h ≤ 3.0	+ 1.3	+ 0.6
400 ≤ b < 600	< 0.6	+ 1.0	+ 0.5
	0.6 ≤ h < 1.0	+ 1.2	+ 0.6
	1.0 ≤ h < 2.0	+ 1.4	+ 0.7
	2.0 ≤ h ≤ 3.0	+ 1.6	+ 0.8
600 ≤ b < 1200	—	+ 4.0	+ 2.0
1200 ≤ b < 1500	—	+ 5.0	+ 2.0
1500 < b	—	+ 6.0	+ 3.0

* The lower limit of the tolerance field is always 0.

5.1.3. Length tolerance

Nominal length l (mm)	Tolerances (mm)	
	Standard	Reduced
l < 2000	6	3
l ≥ 2000	0.3% of the length	0.15% of the length

5.1.4. Flatness

Tolerance	Nominal width b (mm)	Flatness tolerance (mm)		
		Nominal width (mm)		
		< 0,7	>= 0,7 < 1,2	>= 1,2
Standard	b < 600	7	6	5
	600 ≤ b < 1200	10	8	7
	1200 ≤ b < 1500	12	10	8
	1500 ≤ b	17	15	13
Reduced (FS)	b < 600	4	3	2
	600 ≤ b < 1200	5	4	3
	1200 ≤ b < 1500	6	5	4
	1500 ≤ b	8	7	6

The flatness tolerance values for the sheets made of high-strength structural steels are increased in two steps between <260 to <340 N/mm².

The flatness tolerances for sheets with yield point over 340 N/mm² are subject to special agreement.

Note:

The size and flatness tolerances differing from those in the table above are subject to special agreement.

5.2. Accepted tolerances according to specifications for hot rolled pickled products of standard EN 10051.

5.2.1. Thickness tolerances

Relevant specifications for continuous hot rolled strips from low carbon steel for cold forming

Nominal thickness h (mm)	Standard tolerances nominal width b (mm)		Reduced tolerances nominal width b (mm)	
	b ≤ 1200	1200 < b ≤ 1500	b ≤ 1200	1200 < b ≤ 1500
h ≤ 2.00	± 0.13	± 0.14	± 0.08	± 0.09
2.00 < h ≤ 2.50	± 0.14	± 0.16	± 0.08	± 0.09
2.50 < h ≤ 3.00	± 0.15	± 0.17	± 0.09	
3.00 < h ≤ 4.00	± 0.17	± 0.18	± 0.09	
4.00 < h ≤ 5.00	± 0.18	± 0.20	± 0.09	
5.00 < h ≤ 6.00	± 0.20	± 0.21	± 0.09	0.10

Thickness tolerances of HR heavy and light gauge strips produced from A-B-C-D category steel are separately specified in standard EN 10051.

5.2.2. Width tolerance

Nominal width b (mm)	Width tolerance (mm)*	
	Rolled edges	Cut edges
b ≤ 1200	+ 20	+ 3
1200 < b ≤ 1500	+ 20	+ 5
1500 < b	+ 25	+ 6

* The lower value of the tolerance field is always 0.

5.2.3. Length tolerance

Nominal length l (mm)	Tolerance (mm)
l < 2000	+ 5
2000 ≤ l ≤ 3200	+0.005 nominal length

5.2.4. Flatness

Nominal thickness h (mm)	Nominal width b (mm)	Surface flatness tolerance (mm)	
		Standard	Reduced
h ≤ 2.00	b ≤ 1200	18	9
	1200 < b ≤ 1500	20	10
	1500 < b	25	13
2.00 < h ≤ 6	b ≤ 1200	15	8
	1200 < b ≤ 1500	18	9
	1500 < b	23	12

Note:

In case of dimensional and flatness tolerance requirements differing from the values given in the above table, separate agreement is necessary.

5.2.5. General requirements

The specified tolerances are not to be applied for the edges; the total length of the edges is to be calculated on the basis of the following formula:

$$l(m) = \frac{90}{\text{Nominal thickness (mm)}}$$

if the result is max. 20 m.

6. TEMPORARY ANTI-CORROSION PROTECTION

The temporary anti-corrosion protection is made by oiling, and its amount should be specified by ordering in accordance with the following:

oil-free (dry)*,	
slight oiling	0.4–0.7 g/m ² per side,
medium oiling	0.8–1.2 g/m ² per side,
heavy oiling	1.3–2.0 g/m ² per side.

The amount of oil applied can also be ordered by specifying a definite value in the range of 0.4–2.0 g/m².

*In the case of an oil-free product the company takes no responsibility for rusting.

The oiled product gets a protection that, with correct packaging and storing as well as correct transport and storage conditions, will not rust for 3 months.

7. ORDERED QUANTITIES

The smallest lot weight that can be ordered

	Customary	Non-customary
Sheet metal	10 t	13–20 t (depending on the width)
Coil	13–20 t (depending on the width)	13–20 t (depending on the width)

A product can be considered customary if its width is 1000, 1250, 1500 mm, or every such dimension that can be split from these widths by a division without remainder.

At the fulfilment of the order, a minimum 10% weight difference is allowed.

7.1. Weight of sheet bundles

Mass of the usual sizes, generally	max. 4 t
Specified height of the bundle	min. 50 mm max. 250 mm

For this reason the weight of a bundle of 500 x 1000 mm can be maximum 1000 kg.

7.2. Weight of wide strips

Depending on width, without welding seam and with 500 mm internal diameter:

11.5–13.3 kg/mm

Coil weight at normal production conditions: about 13 t at 1000 mm width
about 17 t at 1250 mm width
about 20 t at 1500 mm width

Smaller coil weights can be formed by cutting.

7.3. Weight of slit (narrow) strips

11.5–13.3 kg/mm

or fractional weights that can be produced from this range of weight without a remainder.

Example:

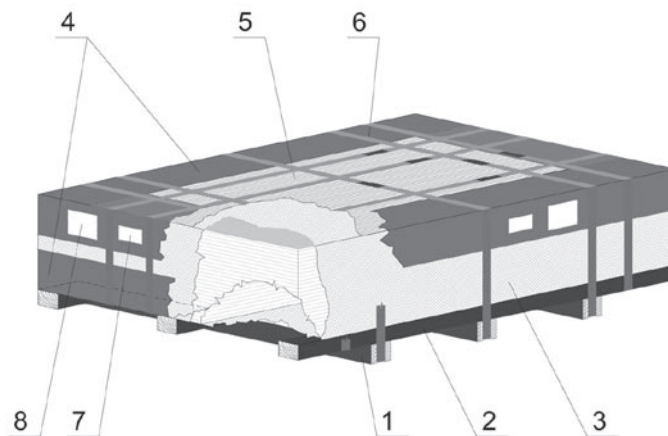
In the case of 500 mm inside diameter and 1550 mm outside diameter the weight of a 50 mm wide ring can vary between 575 and 665 kg. The smallest outside diameter of a coil that can be produced must be 100 mm larger than its inside diameter.

8. PACKAGING (BASIC TYPES)

We would like to satisfy the customers' storage and transport requests at the lowest possible expenditure and to recycle the packaging material. We make every effort to satisfy the customer's requests. We supply our products with environmentally friendly packaging that involves foil coated paper and paper edge protectors. The figures below show the characteristic packaging of our main products.

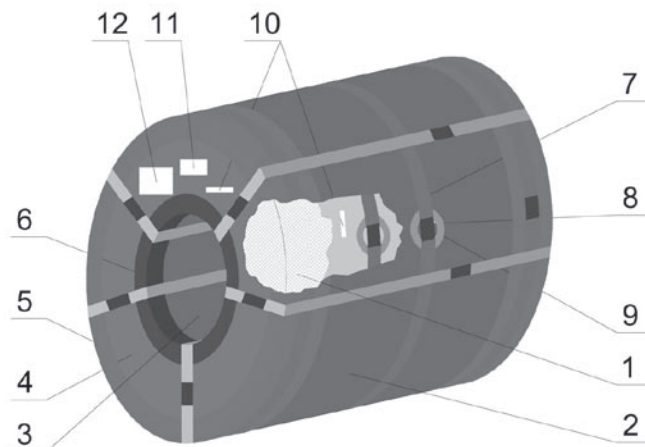
8.1. Packaging of sheets (DASZ 35*)

1. transversal bar
2. longitudinal bar
3. foil coated paper
4. paper edge protector
5. plastic coated mainboard
6. banding strap
7. „A” ticket
8. „C” ticket



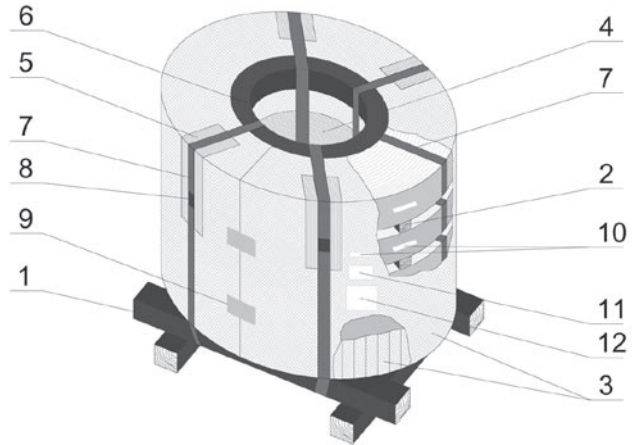
8.2. Packaging of coils – with a horizontal axis (DASZ 36*)

1. foil coated paper
2. painted metal outer guard
3. painted metal inner guard
4. painted metal side protecting ring
5. painted metal outer edge guard
6. painted metal inner edge guard
7. strapping
8. clip
9. clip filler piece
10. „CS” ticket
11. „A” ticket
12. „C” ticket



8.3. Packaging of coils — with a vertical axis (DASZ 36*)

1. pallet
2. intermediate wooden piece
3. foil coated paper
4. plastic coated inner guard
5. plastic coated bent edge guard
6. painted metal inner edge guard
7. strapping
8. clip
9. adhesive band
10. „CS” ticket
11. „A” ticket
12. „C” ticket



* factory standard

9. DOCUMENTS

Identification of the product is by labels with barcode of type CODE 39.

The manufacturer supplies its products with the following documents:

In case of domestic contracts

- Consignment note quality certificate according to 10204 standard (accompanying list)
- Commercial invoice
- Label (on the product)
- Certification of origin on request

In case of export contracts as an extra to the above mentioned

- EUR-1 printed form
- CMR
- Duty bill
- Quality certificate according to EN10204 standard

We also satisfy special customer requirements concerning product marking, documentation and information.

ISD DUNAFERR DANUBE IRONWORKS PRIVATE COMPANY LIMITED BY SHARES

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