DOST
STEELS LTD.

RAISING THE BAR

THE POWER OF GRADE 60 & 75 REBAR

DOST STEELS LTD.

www.doststeels.com

MISSION

To be an agent of change by providing innovative solutions. **DSL** will lead the market and raise the bar for quality standards prevailing in the country. It will offer rebar which gives true and lasting value to our customers.

VISION

To become the number one quality steel products supplier for Pakistan.

COMPANY OVER VIEW

Dost Steels Ltd (DSL) is the largest & technologically most advanced steel manufacturing plant in the country. It is devoted to the production of high quality graded steel rebars. While most of Pakistan's steel manufacturing relies on outdated processes, we have pioneered new methods with our first ever fully automatic, straight line, state of the art, European steel re rolling rebar plant.

Steel deformed rebars are made from Prime quality steel billets. The target is primarily the construction industry and we are engaged in both the projects and the retailer network. The production capacity is **0.4 million** tons per annum in compliance to both ASTM & British standards. We have recently been certified from PSQCA, which has the authority to carry out checks – evaluating the supply chain, from the producer till the stockist and to the end user, hence ensuring that incidents like the collapse of the Margalla Tower and the Karachi flyover do not happen in the future.

Our employees are mainly Pakistani, though we have some Italian & Turkish technicians on board that constitute a dynamic team.

DSL believes that...

"WE GROW WHEN OUR PEOPLE GROW".

OUR PRODUCT

- Grade 60 and above rebar according to ASTM A615, ASTM A706 & BS4449:2005
- Diameter upto 40 mm
- Standard length 12.2 mtr
- Max lenght upto 15 mtr for specialized order
- Cut to length / customized size for bulk order

MANUFACTURING FACILITY

State of the art manufacturing facility backed by European technology supplied by:

SIEMENS

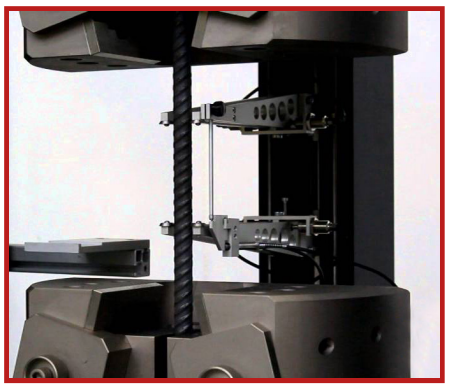
Nidec
All for dreams

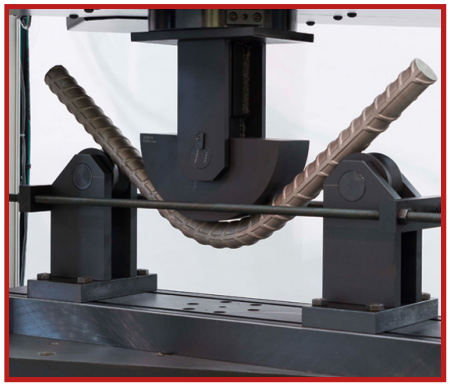
PRIMETALS TECHNOLOGIES

FORNI E COMBUSTIONE

IN-HOUSE TESTING LABS

Every 30 minutes tests are conducted to analyse the product quality, hence ensuring delivery of standard material.





- **Yield Strength**
- **Tensile Strength**
- **Elongation**
- **Bend Test**

DSL'S KEY FEATURES

- Pakistan's 1st & largest fully automatic steel rebar plant
- Superior precision & control
- Seismic resistantance suitable for earthquake prone area.
- Global standard compliant rebar
- Strength & ductility assurance
- Upto 25% steel saving due to superior quality

QUALITY ASSURANCE

PRIME QUALITY RAW MATERIAL USED

To ensure quality product, frequent tests are conducted before putting it in the production line.

Number. 005770

Pakistan Standards

Government of Pakistan

Pakistan Standards and Quality Control Authority

Licence for the use of the Pakistan Standard Mark

Agreement No. 1253/L-2107

Licence No. CML/N-1253/2018

M/s. Dost Steels Ltd,

Address: 52-KM Multan Road, Phool Nagar Bypass, District Kasur.

Licence shall be valid from 9-May-18 *to* 8-May-19 *and renewable as prescribed under the Rules.*

Signature

Engr. Waseem Ahmed Mirza

DIRECTOR

Place Lahore

Date: 22-May-18

THE FIRST SCHEDULE

PS Mark	Article / Process	Pakistan Standard(s)
1	2	3
Pakistan Standards	Deformed Steel Bar Grade-60 Sizes & Brand As Per Annex-A	PSS:1879/2014(R)

THE SECOND SCHEDULE

Article / Process	Unit	Marking Fee Per Unit	Mode of Payment
1	2	3	4
Deformed Steel Bar Grade-60 Sizes & Brand As Per Annex-A	Ex-Factory Price	0.1%	Through Bank Draft Quarterly

PSQCA CERTIFICATE

www.doststeels.com

PARAMETERS SPECIFIED BY ASTM A615

ASTM INTERNATIONAL

Table 1: Deformed Bars Designation Numbers, Nominal Weights [Massess]. Nominal Dimensions, and Deformation Requirements

Bar Designation No. [A]	Norminal Weight, [lb/ ft]	Nominal Dimensions[B]			Deformation Requirements, in. [Mm]		
	Norminal Mass, [kg/m]	Diameter in. [mm]	Cross Sectional Area in. [2] [mm²]	Perimeter, in. [mm]	Maximum Average Spacing	Minimum Average Height	Maximum Gap (Chord of 12.5 % of Nominal Perimeter)
3[10]	0.376 [0.560]	0.375 [9.5]	0.11 [71]	1.178 [29.9]	0.262 [6.7]	0.015 [0.38]	0.143 [3.6]
4[13]	0.668 [0.994]	0.500 [12.7]	0.20 [129]	1.571 [39.9]	0.350 [8.9]	0.020 [0.51]	0.191 [4.9]
5[16]	1.043 [1.522]	0.625 [15.9]	0.31 [199]	1.963 [49.9]	0.437 [11.1]	0.028 [0.71]	0.239 [6.1]
6[19]	1.502 [2.235]	0.750 [19.1]	0.44 [284]	2.356 [59.8]	0.525 [13.3]	0.038 [0.97]	0.286 [7.3]
7[22]	2.044 [3.042]	0.875 [22.2]	0.60 [387]	2.749 [69.8]	0.612 [15.5]	0.044 [1.12]	0.334 [8.5]
8[25]	2.670 [3.973]	1.000 [25.4]	0.79 [510]	3.142 [79.8]	0.700 [17.8]	0.050 [1.27]	0.383 [9.7]
9[29]	3.400 [5.060]	1.128 [28.7]	1.00 [645]	3.544 [90]	0.790 [20.1]	0.056 [1.42]	0.431 [10.9]
10[32]	4.303 [6.404]	1.270 [32.3]	1.27 [819]	3.99 [101.3]	0.889 [22.6]	0.064 [1.63]	0.487 [12.4]
11[36]	5.313 [7.970]	1.410 [35.8]	1.56 [1006]	4.43 [112.5]	0.987 [25.1]	0.071 [1.8]	0.540 [13.7]
14[43]	7.65 [11.380]	1.693 [43.0]	2.25 [1452]	5.32 [135.1]	1.185 [30.1]	0.085 [2.16]	0.648 [16.5]
18[57]	13.6 [20.240]	2.257 [57.3]	4.00 [2581]	7.09 [180.1]	1.580 [40.1]	0.102 [2.59]	0.864 [21.9]

[A] Bar numbers are based on the number of eights of an inch included in the nominal diameter of the bars [bars numbers approximate the number of millimetres of the nominal diameter of the bar]

[B] The nominal dimemsions of a deformed bars are equivalent to those of a plain round bar having the same weight [mass] per foot [meter] as the deformed bar.

Table 2: Tensile Requirements

	Grade 40 [300][A]	Grade 60 [420]	Grade 75 [520][B]
Tensile Strength, min, psi [Mpa]	70000 [500]	90000 [620]	100000 [690]
Yield Strength, min,psi [Mpa]	40000 [300]	60000 [420]	75000 [520]
Elongation in 8 in [203.5 mm], min.%			
Bar Designation Number			
3 [10]	11	9	...
4,5 [13, 16]	12	9	...
6 [19]	12	9	7
7, 8 [22, 25]	...	8	7
9, 10, 11 [29, 32, 36]	...	7	6
14, 18 [43,57]	...	7	6

[A] Grade 40 [300] bars are furnished only in sizes 3 through 6 [10 through 19]

[B] Grade 75 [520] bars are furnished only in sizes 6 through 18 [19 through 57]

Table 3: Bend Test Requirements

Bar Designation Number	Pin Diameter for Bend Tests [A]		
	Grade 40 [300]	Grade 60 [420]	Grade 75 [520]
3, 4, 5 [10, 13, 16]	*3 1/2 d²*	*3 1/2 d²*	...
6 [19]	*5d*	*5d*	*5d*
7, 8 [22,25]	...	*5d*	*5d*
9, 10, 11 [29, 32, 36]	...	*7d*	*7d*
14, 18 [43, 57] (90)	...	*9d*	*9d*

PARAMETERS SPECIFIED BY ASTM A706

ASTM INTERNATIONAL

Table 1: Deformed Bars Designation Numbers, Nominal Weights [Massess], Nominal Dimensions, and Deformation Requirements

Bar Designation No. [A]	Norminal Weight, [lb/ ft] Norminal Mass, [kg/m]	Nominal Dimensions [B]			Deformation Requirements, in. [Mm]		
		Diameter in. [mm]	Cross Sectional Area in.^{2} [mm^2]	Perimeter, in. [mm]	Maximum Average Spacing	Minimum Average Height	Maximum Gap (Chord of 12.5 % of Nominal Perimeter)
3[10]	0.376 [0.560]	0.375 [9.5]	0.11 [71]	1.178 [29.9]	0.262 [6.7]	0.015 [0.38]	0.143 [3.6]
4[13]	0.668 [0.994]	0.500 [12.7]	0.20 [129]	1.571 [39.9]	0.350 [8.9]	0.020 [0.51]	0.191 [4.9]
5[16]	1.043 [1.522]	0.625 [15.9]	0.31 [199]	1.963 [49.9]	0.437 [11.1]	0.028 [0.71]	0.239 [6.1]
6[19]	1.502 [2.235]	0.750 [19.1]	0.44 [284]	2.356 [59.8]	0.437 [11.1]	0.038 [0.97]	0.286 [7.3]
7[22]	2.044 [3.042]	0.875 [22.2]	0.60 [387]	2.749 [69.8]	0.612 [15.5]	0.044 [1.12]	0.334 [8.5]
8[25]	2.670 [3.973]	1.000 [25.4]	0.79 [510]	3.142 [79.8]	0.700 [17.8]	0.050 [1.27]	0.383 [9.7]
9[29]	3.400 [5.060]	1.128 [28.7]	1.00 [645]	3.544 [90]	0.790 [20.1]	0.056 [1.42]	0.431 [10.9]
10[32]	4.303 [6.404]	1.270 [32.3]	1.27 [819]	3.99 [101.3]	0.889 [22.6]	0.064 [1.63]	0.487 [12.4]
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[B] The nominal dimemsions of a deformed bars are equivalent to those of a plain round bar having the same weight [mass] per foot [meter] as the deformed bar.

Table 2: Tensile Requirements

	Grade 60 [420]
Tensile Strength, min, psi [Mpa]	80.000 [550]
Yield Strength, min, psi [Mpa]	60.000 [420]
Elongation in 8 in [203.2 mm], min.%	
Bar Designation Number	
3,4, 5, 6 [10, 13, 16, 19]	14
7, 8, 9, 10, 11[22, 25, 29, 32, 36]	12
14, 18 [43, 57]	10

Table 3: Bend Test Requirements

Bar Designation Number	Pin Diameter for Bend Tests [A]
	Grade 60 [420]
3, 4, 5 [10, 13, 16]	*3 1/2 d* [B]
6 [19]	*5d*
7, 8 [22,25]	*5d*
9, 10, 11 [29, 32, 36]	*7d*
14, 18 [43, 57] (90)	*9d*

PARAMETERS SPECIFIED BY BS4449:2005

Table 1: Cross sectional area and mass

Nominal Size	Cross Sectional Area area mm²	Mass per Meter R un kg / m	Mass per Foot Run gram / ft
6 [1]	28.3	0.222	67.67
8	50.3	0.395	120.40
10	78.5	0.616	187.76
12	113.1	0.888	270.66
16	201.1	1.579	481.28
20	314.2	2.466	751.64
25	490.9	3.854	1174.70
32	804.2	3.854	1924.2
40	1256.6	9.864	3006.55
50 [1]	1963.5	15.413	4697.88

[1] This is a non-preferred size

Nominal Size mm	Tolerance on Mass per Meter Run %
6	± 9
8 and 10	± 6.5
12 and over	± 4.5

Table 3: Chemical Compostion of Steel Grade: Cast Analysis

Element	Grade 250 % (max.)	Grade 460 % (max.)
Carbon	0.25	0.25
Sulphur	0.060	0.050
Phosphorous	0.060	0.050
Nitrogen	0.012	0.012

Table 4: Physical Properties of Steel Grades

Grade	Yield Strength R_K [1] N / mm²	Stress Ration R_m / R_g [2] (min.)	Elongation at Fracture A5 (min.) %	Total elongation at maximum force A_g [3] (min.) %
250	250	1.15	22	-
460A [4]	460	1.05	12	2.5
460B [3]	460	1.08	15	5

1. For routine testing the yield strength shall be considered a minimum value. For determination of long term quality level, the values given shall be for the characteristic strength.

2. Rm is the tensile strength

3. The total elongation at maximum force shall be measured and recorded and available for inspecttion, but values obtained below the minimum value specifed shall not be a cause for non-conformity with this British Standard.

4. Ductility classes A and B are designated ductility classes N and H respectively in DD ENV 1992/1/1:1992.

NOTE 1:

The maximum value for nitrogen does not apply if the chemical composition shows a minimum aluminum content of 0.020 % or if sufficient other nitrogen binding elements are present.

NOTE 2:

Nitrogen content is not normally given on a release certificate.

CORPORATE SOCIAL RESPONSIBILITY

Being a socially responsible company, for environment conservation **Dost Steels Ltd (DSL)** houses its own water treatment plant which recycles the water used for various stages of manufacturing. This plays a big role in protecting our environment and ensures that waste particles such as iron oxide and oil sludge do not mix into our precious surroundings causing them harm.

DSL also uses a Heat Recuperator for recycling of all waste heat and exhaust flue gases to be recovered and reused in conjunction with fresh input. This greatly reduces the negative environmental impact due to the steel bar manufacturing process. Furthermore, a proper drainage system is in place to avoid polluted water seeping into the land.

DOST STEELS LTD.

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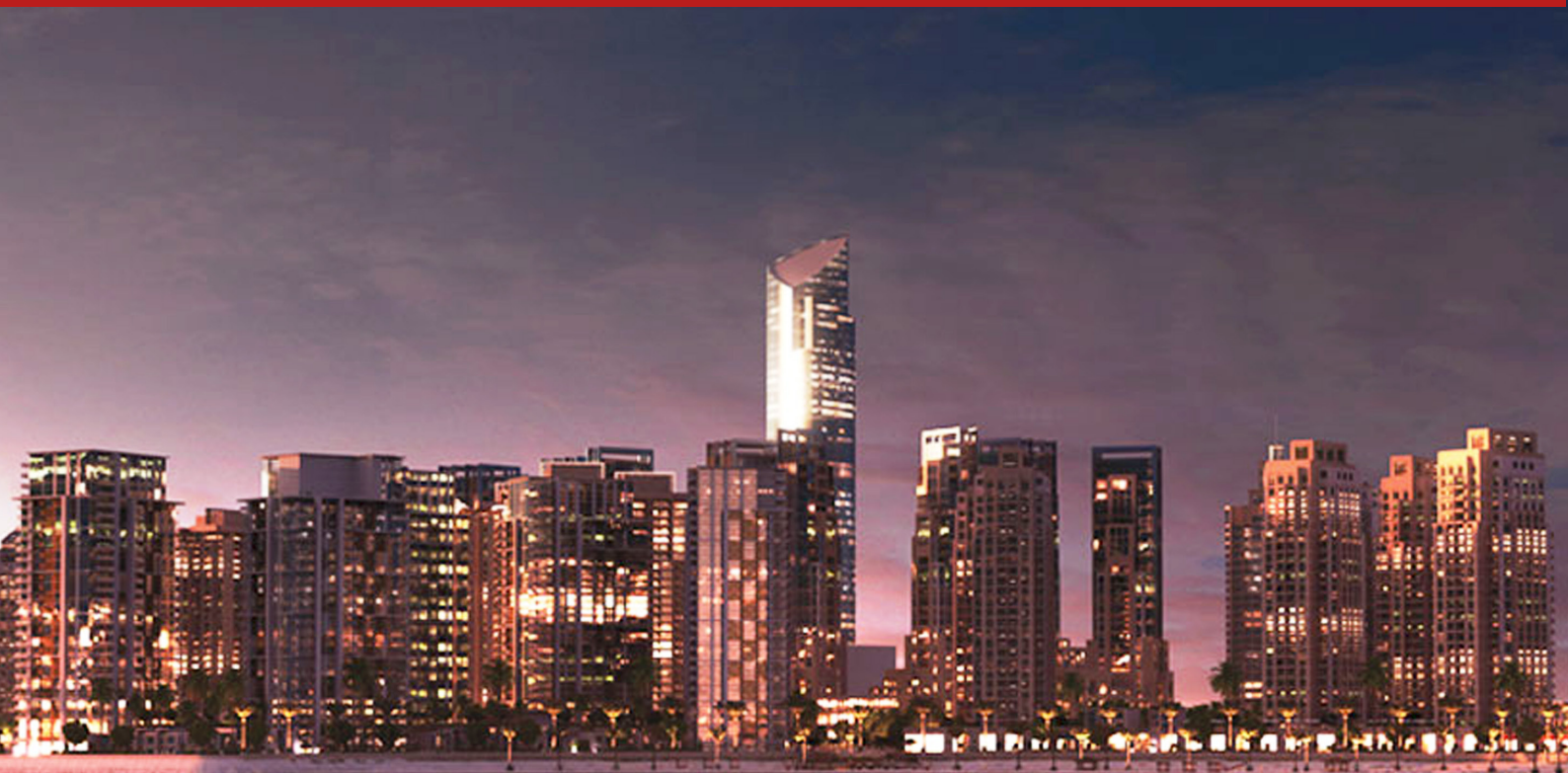

Head Office

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Registered Office

101, Chapal Plaza, Hasrat Mohani Road, off II, Chundigarh Road, Karachi 74000,Pakistan

Plant Address

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