

# Threaded Bars 500, 550, 555, 670



LIBERTY Ostrava  
[www.libertysteelgroup.com](http://www.libertysteelgroup.com)



MEMBER OF



**LIBERTY Ostrava is an integrated steel business with an annual production capacity of approximately 3.6 million tonnes serving construction, machinery and oil & gas industries.**

The company is a domestic leader in the manufacture of road barriers and tubes. In addition to the Czech market, it supplies its products to more than 40 countries around the world. Together with its subsidiaries in Ostrava, the company has 6,000 employees. The company

manufactures its products with a minimum possible environmental footprint. It is part of LIBERTY Steel Group, which is part of GFG Alliance, a collection of global businesses and investments owned by Sanjeev Gupta and his family. The Alliance is structured into three core industrial pillars: LIBERTY Steel Group, ALVANCE Aluminium Group and SIMEC Energy Group. Headquartered in London, GFG Alliance employs 35,000 people, across 10 countries and has revenues of USD \$20bn.

### Liberty Ostrava Facilities

- 3 coke oven batteries
- 5 sinter belts
- 3 blast furnaces (2 operational)
- 4 tandem furnaces
- 3 continuous casting machines
- 6 rolling mills (incl. hot-strip mill, big and small Stiefel pipe mills, wire rod mill, heavy section mill, fine & medium section mill)
- Mine support and road barrier lines

### Main Products

Hot rolled coils, sheets and strips, road barriers, merchant bars and sections, wire rods, tubular steels, mine supports, engineering products, transformer cores, threaded bars, rebars, hot rolled spring steel flat bars

### Key Markets

Construction, machinery and automotive

### Certification

ISO 9001

ISO 14001

OHSAS 18001

ISO 50001



# Threaded Bars 500, 550, 555, 670

## Technical Characteristics of the Thread Bar System

- Easy length adjustment, due to the entire coarse thread over the whole length of the bar
- Shortening by cutting and extension by accessories also possible on the construction site
- Easier to screw compared to standard threads
- The coarse thread is resistant to rough handling and dirt, because the coarse thread cleans itself during assembling
- Consistently high quality through internal and external tests

## Service

- Worldwide shipments including all administrative formalities
- Fast communication, flexibility & reliability
- On time delivery
- Quick and accurate document handling

## On Request

- Bars and accessories on request available in black and hot-dip-galvanized
- Special lengths & bundling
- Charpy test (CVN)

## Existing Approvals

High strength reinforcement system (ETA approval)

## Advantages Over Conventional Reinforcement

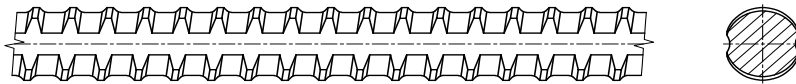
- Anchorage length can be reduced by special end anchorages
- Lap splices can be replaced by a simple coupler connection
- Reduction of the reinforcement with constant load bearing capacity by using a higher steel grade

Current certificates can be downloaded at [www.libertyostrava.cz](http://www.libertyostrava.cz)



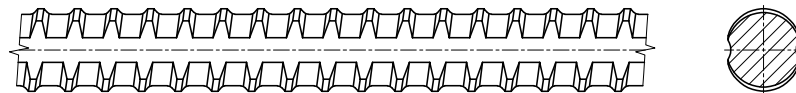
# Specifications

## Liberty Ostrava Threaded Bar 500/550, 555/700, Left-hand Thread



Nominal diameter (d)	mm	16	20	25	28	32	40	50	57.5	63.5	75	
Maximal diameter (d)	mm	17.9	22.4	27.9	31.2	35.7	44.6	55.6	63	69	81.5	
R <sub>p0,2</sub> (min)	MPa	500							555		500	
Load at Yield (min)	kN	100	157	246	308	402	629	982	1441	1758	2209	
R <sub>m</sub> (min)	MPa	550							700		550	
Ultimate Load (min)	kN	110	172	270	339	442	691	1078	1818	2217	2430	
Elongation A <sub>gt</sub> (min)	%	6						5				
Weight	Kg/m	1.58	2.47	3.85	4.83	6.31	9.87	15.41	20.38	24.86	34.68	

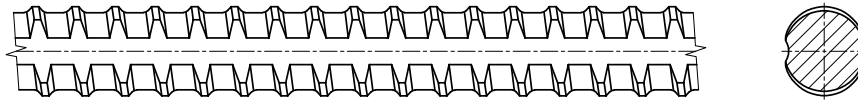
## Liberty Ostrava Threaded Bar 550/620, Left-hand Thread



Nominal diameter (d)	mm	20	25	28	32	40	50	57.5	63.5	75	
Maximal diameter (d)	mm	22.4	27.9	31.2	35.7	44.6	55.6	63	69	81.5	
R <sub>p0,2</sub> (min)	MPa	550									
Load at Yield (min)	kN	173	270	339	442	691	1080	1428	1742	2430	
R <sub>m</sub> (min)	MPa	620									
Ultimate Load (min)	kN	195	304	382	499	779	1217	1610	1963	2739	
Elongation A <sub>gt</sub> (min)	%	5									
Weight	Kg/m	2.47	3.85	4.83	6.31	9.87	15.41	20.38	24.86	34.68	

## Specifications continued...

### Liberty Ostrava Threaded Bar 670/800, Right-hand Thread

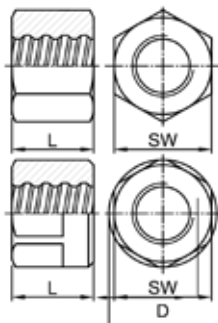


Nominal diameter (d)	mm	18	22	25	28	30	35	43	50	57.5	63.5	75
Maximal diameter (d)	mm	20.4	24.2	27.5	31.5	33.5	39.2	47.9	55.6	62.8	69	81.5
$R_{p0,2}$ (min)	MPa	670										
Load at Yield (min)	kN	170	255	329	413	474	645	973	1315	1740	2122	2960
$R_m$ (min)	MPa	800										
Ultimate Load (min)	kN	203	304	393	493	566	770	1162	1571	2078	2534	3535
Elongation $A_{gt}$ (min)	%	$A_{gt} 5\%, A_{10d} 7\%$										
Weight	Kg/m	2.00	2.98	3.85	4.83	5.54	7.55	11.40	15.41	20.38	24.86	34.68



# Accessories for 500/550/555/670

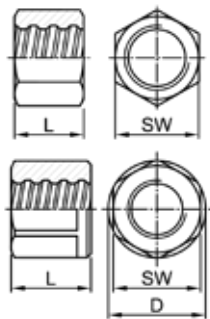
## Hexagonal Nut



### L2002

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
16L	0.20	32	40	-
20L	0.26	36	45	-
25L	0.34	41	50	-
28L	0.48	46	55	-
32L	0.78	55	60	-
40L	1.18	65	70	-
50L	2.17	80	85	-
57L	3.65	90	100	102
63L	3.57	100	90	108
75L	2.90	100	100	108

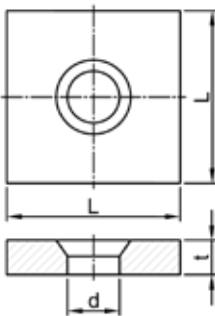
## Lock Nut, Long



### L2003

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
16L	0.15	32	30	-
20L	0.16	32	40	-
25L	0.25	41	40	-
28L	0.26	41	45	-
32L	0.47	50	50	-
40L	0.85	60	65	-
50L	2.10	70	80	80
57L	2.87	90	80	102
63L	3.74	90	115	102
75L	2.37	100	80	108

## Plate for Spherical. Nut



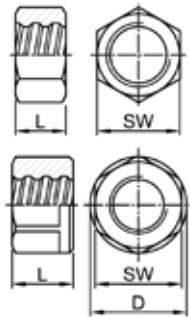
### L2011

Ø [mm]	Weight [kg]	L [mm]	t [mm]	d [mm]
16L	0.15	50	10	20
20L	0.37	70	12	25
25L	0.34	70	12	30
28L	1.33	100	20	33
32L	1.91	120	20	40
40L	4.48	150	30	47
50L	10.78	190	45	58
57L	16.25	220	50	67
63L	20.09	245	50	70
75L	32.60	275	65	88

## Accessories for 500/550 and 550/620 continued...

### Lock Nut, Short

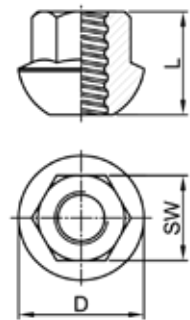
#### L2040



Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
16L	0.10	32	20	-
20L	0.08	32	20	-
25L	0.14	41	20	-
28L	0.15	41	25	-
32L	0.28	50	30	-
40L	0.45	60	35	-
50L	1.21	80	50	-
57L	2.16	90	60	102
63L	2.18	90	75	108
75L	2.35	100	80	108

### Spherical Nut, 55°

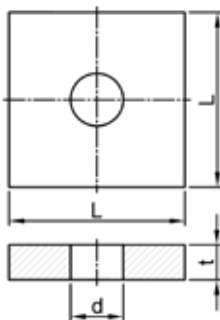
#### L2044



Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
16L	0.10	27	35	33
20L	0.26	36	49	41
25L	0.35	41	55	45
28L	0.45	41	62	54
32L	0.65	46	70	57
40L	1.25	60	88	70
50L	2.60	80	107	85
57L	4.15	90	120	100
63L	6.00	100	144	115
75L	9.69	120	165	120

### Plate

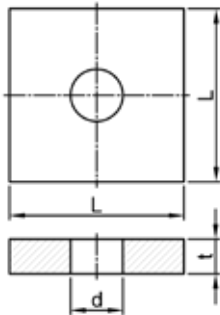
#### L2138



Ø [mm]	Weight [kg]	L [mm]	t [mm]	d [mm]
16L	0.26	55	12	20
20L	0.52	70	15	25
25L	0.89	80	20	30
28L	1.14	90	20	33
32L	1.74	100	25	38
40L	3.27	125	30	47
50L	5.87	155	35	58
57L	9.13	180	40	65
63L	12.69	200	45	72
75L	20.33	230	55	86

## Accessories for 500/550 and 550/620 continued...

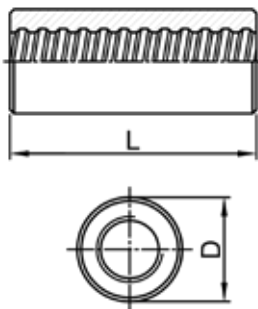
### Plate



### L2139

Ø [mm]	Weight [kg]	L [mm]	t [mm]	d [mm]
16L	0.31	60	12	20
20L	0.70	80	15	25
25L	1.16	90	20	30
28L	1.79	100	25	33
32L	2.15	110	25	38
40L	4.91	140	35	47
50L	8.79	175	40	58
57L	12.96	200	45	65
63L	17.40	220	50	72
75L	29.10	260	60	86

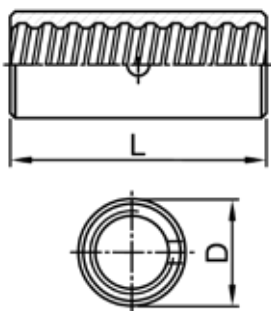
### Coupler



### L3003

Ø [mm]	Weight [kg]	D [mm]	L [mm]
16L	0.70	32	90
20L	0.52	36	105
25L	0.61	40	115
28L	0.85	45	125
32L	1.26	52	140
40L	2.34	65	160
50L	4.23	80	200
57L	10.31	102	230
63L	9.55	102	260
75L	8.07	108	240

### Contact Coupler



### L3006

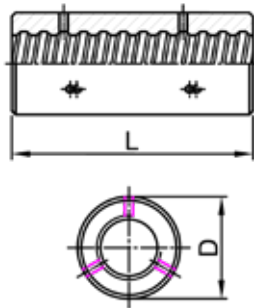
Ø [mm]	Weight [kg]	D [mm]	L [mm]
16L	0.17	27	65
20L	0.25	32	70
25L	0.30	36	80
28L	0.40	40	85
32L	0.50	45	90
40L	0.82	54	120
50L	1.09	63	160
57L	3.36	83	170
63L	4.28	90	200
75L	5.33	102	210



## Accessories for 500/550 and 550/620 continued...

### Coupler with Set Screws

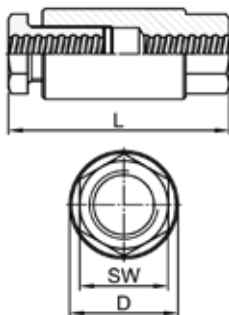
#### L3020



Ø [mm]	Weight [kg]	D [mm]	L [mm]
16L	0.70	32	90
20L	0.52	36	105
25L	0.61	40	115
28L	0.85	45	125
32L	1.26	52	140
40L	2.34	65	160
50L	4.23	80	200
57L	10.31	102	230
63L	9.55	102	260
75L	8.07	108	240

### Turnbuckle

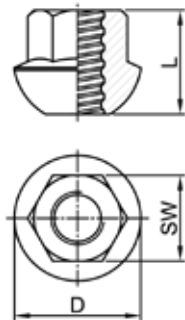
#### L3105



Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
32L	3.60	60	225	-
40L	6.60	80	270	-
50L	14.30	100	305	-
57L	20.70	100	340	127
63L	22.00	100	390	127
75L	26.22	110	375	140

# Accessories for 670/800

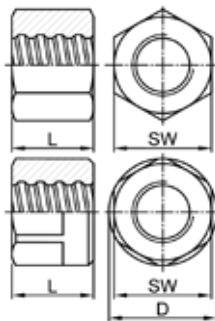
## Spherical Nut 55°



### R2001

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
18R	0.20	32	35	43
22R	0.31	36	45	53
25R	0.43	41	50	60
28R	0.60	46	55	67
30R	0.79	50	60	71
35R	1.30	60	70	83
43R	2.20	70	85	102
50R	3.59	80	100	116
57R	5.50	90	115	137
63R	7.30	100	125	151
75R	11.90	120	150	174

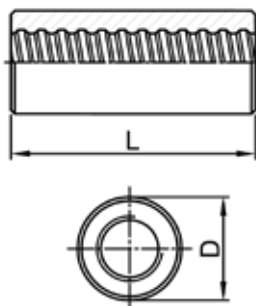
## Hexagonal Nut



### R2002

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
18R	0.29	36	45	-
22R	0.39	41	50	-
25R	0.53	46	55	-
28R	0.67	50	60	-
30R	0.90	55	65	-
35R	1.37	65	70	-
43R	2.62	80	90	-
50R	2.80	80	100	-
57R	4.42	90	120	102
63R	4.41	100	110	108
75R	4.90	100	130	108

## Lock Nut, Long

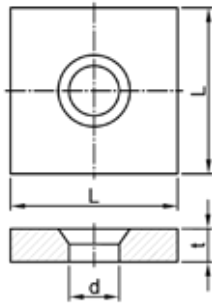


### R2003

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
18R	0.15	30	40	-
22R	0.24	36	45	-
25R	0.35	41	50	-
28R	0.49	46	55	-
30R	0.63	50	60	-
35R	0.77	55	65	-
43R	1.21	70	80	-
50R	2.38	80	90	-
57R	3.42	90	100	102
63R	5.05	100	115	114
75R	3.59	100	120	108

## Accessories for 670/800 continued...

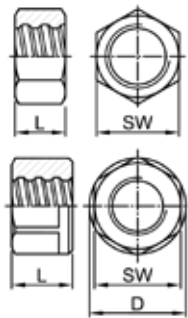
### Plate for Spherical. Nut



#### R2011

Ø [mm]	Weight [kg]	L [mm]	t [mm]	d [mm]
18R	2.20	100	25	27
22R	2.62	110	30	32
25R	3.39	125	30	35
28R	4.59	135	35	40
30R	5.32	145	35	40
35R	8.36	170	40	47
43R	15.90	210	50	58
50R	22.59	240	55	70
57R	32.80	275	60	75
63R	45.20	300	65	82
75R	51.89	325	70	100

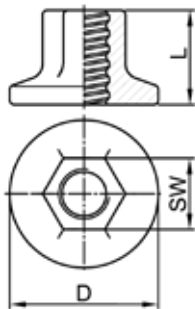
### Lock Nut, Short



#### R2040

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
18R	0.10	30	22	-
22R	0.12	36	22	-
25R	0.15	41	22	-
28R	0.26	46	30	-
30R	0.31	50	30	-
35R	0.47	55	40	-
43R	1.00	70	50	-
50R	1.39	80	50	-
57R	1.93	90	60	102
63R	3.03	100	70	114
75R	2.33	100	80	108

### Anchor Piece

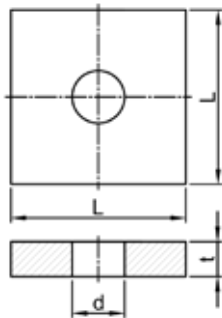


#### R2073

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
18R	0.28	32	35	55
22R	0.43	36	45	65
25R	0.67	41	50	75
28R	0.91	46	55	85
30R	1.10	50	60	90
35R	1.82	60	70	105
43R	2.95	70	85	130
50R	4.48	80	100	150
57R	7.42	90	115	175
63R	9.35	100	125	190
75R	16.82	120	150	230

## Accessories for 670/800 continued...

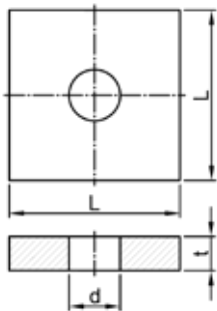
### Plate



### R2138

Ø [mm]	Weight [kg]	L [mm]	t [mm]	d [mm]
18R	-	-	-	-
22R	0.91	80	20	27
25R	1.16	90	20	30
28R	1.41	100	20	34
30R	2.17	110	25	36
35R	2.79	125	25	42
43R	4.84	150	30	50
50R	7.64	175	35	60
57R	12.88	200	45	67
63R	17.31	220	50	74
75R	31.53	260	65	86

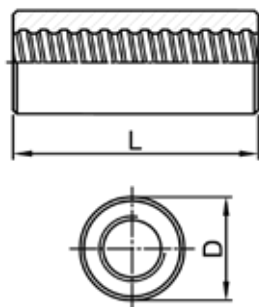
### Plate



### R2139

Ø [mm]	Weight [kg]	L [mm]	t [mm]	d [mm]
18R	-	-	-	-
22R	1.18	90	20	27
25R	1.46	100	20	30
28R	2.2	110	25	34
30R	2.63	120	25	36
35R	4.29	140	30	42
43R	7.4	170	35	50
50R	11.67	200	40	60
57R	19.38	230	50	67
63R	24.06	245	55	74
75R	43.02	290	70	86

### Coupler



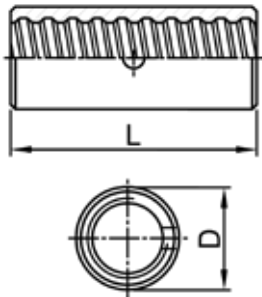
### R3003

Ø [mm]	Weight [kg]	D [mm]	L [mm]
18R	0.56	36	100
22R	0.71	40	110
25R	0.94	45	120
28R	1.36	50	140
30R	1.84	55	150
35R	2.95	65	170
43R	5.42	80	200
50R	7.24	90	210
57R	10.31	102	250
63R	14.48	114	300
75R	8.74	208	260

## Accessories for 670/800 continued...

### Contact Coupler

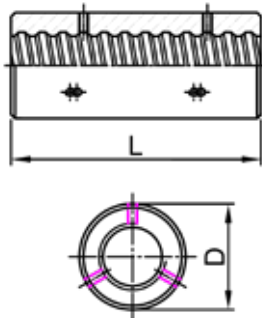
#### R3006



Ø [mm]	Weight [kg]	D [mm]	L [mm]
18R	0.15	27	70
22R	0.25	32	75
25R	0.43	40	80
28R	0.62	45	90
30R	0.55	45	90
35R	0.81	50	120
43R	2.09	65	160
50R	2.25	70	170
57R	3.60	83	180
63R	4.46	90	200
75R	5.95	102	230

### Coupler with Set Screws

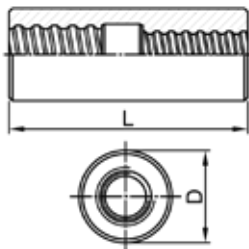
#### R3020



Ø [mm]	Weight [kg]	D [mm]	L [mm]
18R	0.56	36	100
22R	0.71	40	110
25R	0.94	45	120
28R	1.36	50	140
30R	1.84	55	150
35R	2.95	65	170
43R	5.42	80	200
50R	7.24	90	210
57R	10.31	102	250
63R	14.48	114	300
75R	8.74	108	260

### Reducing Coupler

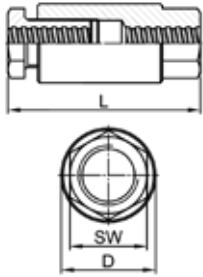
#### R3102



Ø [mm]	Weight [kg]	D [mm]	L [mm]
18R	-	-	-
22R	0.84	40	135
25R	1.26	45	155
28R	1.63	50	165
30R	2.15	55	175
35R	2.57	60	185
43R	5.51	80	200
50R	7.65	85	270
57R	10.98	100	270
63R	15.24	110	315
75R	11.93	110	300

## Accessories for 670/800 continued...

### Turnbuckle



### R3105

Ø [mm]	Weight [kg]	SW [mm]	L [mm]	D [mm]
35R	8.90	80	275	-
43R	13.90	90	330	-
50R	16.77	100	350	-
57R	24.00	100	390	127
63R	25.50	100	405	133
75R	29.40	110	405	140

# Contact with the mill

## Europe

---

### **Liberty Commercial Czech Republic k.s.**

Vratimovská 689/117, 719 00 Ostrava (CZ)

**ID:** 05433266

**VAT:** CZ05433266

**E:** sales.ostrava@libertysteelgroup.com

**T:** +420 595 6847 787

**[www.libertyostrava.cz](http://www.libertyostrava.cz)**

---

### **Liberty Commercial Germany GmbH**

Am Brüll 17, 40878 Ratingen (DE)

### **Liberty Commercial PL Sp. z o.o.**

ul. Francuska nr. 36, 40-506 Katowice (PL)

For further information visit [www.libertysteelgroup.com](http://www.libertysteelgroup.com)

