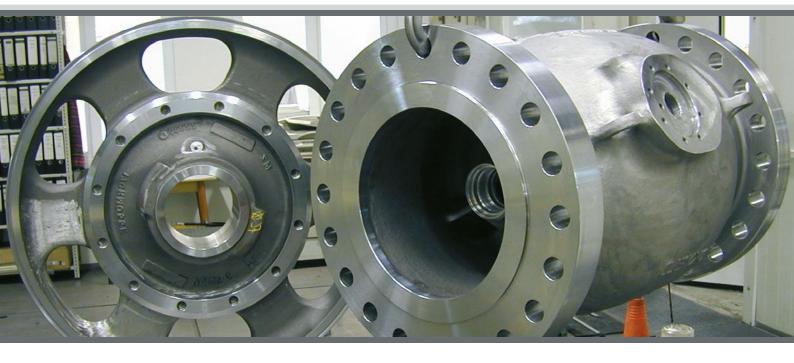
# RANGE OF SUPPLY







### **OUR RANGE OF SUPPLY**

Pleissner Guss GmbH concentrates on supplies and services for the extensive market of special and general engineering as well as valve bodies and pumps in weights ranging from 150 kg to 12 t. The range of materials includes all cast steel grade – from unalloyed to high-alloyed – as well as special alloys based on nickel in accordance with the charts depicted below. Other special qualities and equivalent materials to various standards and customer requirements can also be manufactured on request. Technical preparations for manufacturing castings and product development are implemented using state-of-the-art computer-aided simulation techniques for key parameters of the production process; accordingly, the solidification process, distribution of stresses and even the mechanical features are depicted on request before the production process thereby creating the essential guidelines for intensive consultation to be availed of by our customers.

# LIST OF MATERIALS SUPPLIED SELECTION, ADDITIONAL MATERIALS UPON REQUEST

### STEEL CASTINGS FOR GENERAL APPLICATION ACC. EN

Material number	Designation	Standard Code
-	GE200-GE360	EN 10293
-	GS200 + GS240	EN 10293 / EN 10340
1.1131	G 17Mn5	EN 10293 / EN 10340
1.6220	G 20Mn5	EN 10293 / EN 10340
1.1118	G 24Mn6	EN 10293 / EN 10340
1.1165	G 28Mn6	EN 10293
1.6750	G 20NiMoCr4	EN 10293
1.6759	G 18NiMoCr3-6	EN 10340 / SEW 520
1.6760	G 22NiMoCr5-6	SEW 520
1.7221	G 26CrMo4	EN 10293
1.7230	G 34CrMo4	EN 10293
1.7231	G 42CrMo4	EN 10293









### STEEL CASTINGS FOR GENERAL APPLICATION ACC. ASTM

Designation	Standard Code
Grade 1	A 487
Grade 2	A 487
Grade 4	A 487
Grade 6	A 487
Grade 8	A 487
Grade 9	A 487
Grade 10	A 487
Grade CA15	A 487
Grade CA15M	A 487
Grade CA6NM	A 487

### CAST STEEL FOR HIGH TEMPERATURE ACC. EN

Material number	Designation	Standard Code
1.0619	GP 240GH	EN 10213
1.0625	GP 280GH	EN 10213
1.5419	G 20Mo5	EN 10213
1.7357	G 17CrMo5-5	EN 10213
1.7379	G 17CrMo9-10	EN 10213
1.7706	G17CrMoV5-10	EN 10213
1.7365	GX 15CrMo5	EN 10213
1.4317	GX 4CrNi13-4	EN 10213
1.4405	GX 5CrNiMo16-5-1	EN 10213
n.a.	GX12CrMoVNbN9-1	COST C91
n.a.	GX12CrMoWVNbN10-1-1	COST C10 1 1
n.a.	GX12CrMoCoVNbNB9-2-1	COST CB2

### CAST STEEL FOR HIGH TEMPERATURE ACC. ASTM

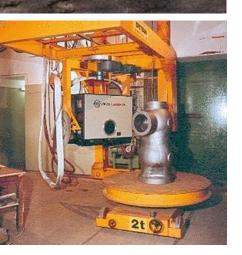
Designation	Standard Code
WCA / WCB / WCC	A 216
WC1	A 217
WC6	A 217
WC9	A 217
WC11	A 217
C5	A 217
C12A	A 217
CA15	A 217
Grade 1, 2, 5, 6, 9, 10, 12	A 356
Grade CA6NM	A 356









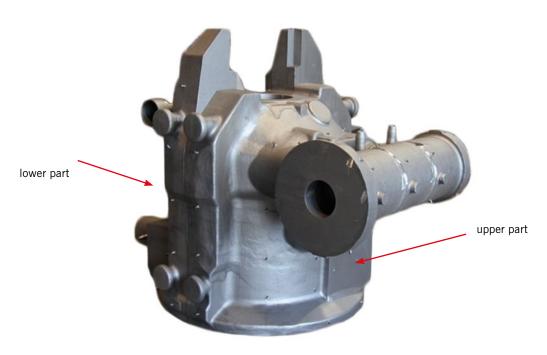


### CAST STEEL FOR LOW TEMPERATURE ACC. EN

Material number	Designation	Standard Code
1.1131	G 17Mn5	EN 10213
1.6220	G 20Mn5	EN 10213
1.5422	G 18Mo5	EN 10213
1.5638	G 9Ni14	EN 10213
1.6982	GX 3CrNi13-4	EN 10213

### CAST STEEL FOR LOW TEMPERATURE ACC. ASTM

Designation	Standard Code
LCA / LCB / LCC	A 352
LC1	A 352
LC3	A 352
Grade CA6NM	A 352



Steam Turbine Casing - G17CrMoV5-10 - upper part 2,800 kg + lower part 2,400 kg



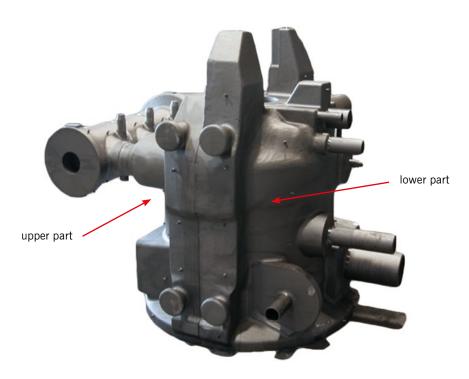
MARTENSITIC STAINLESS STEEL ACC. EN

Material number	Designation	Standard Code
1.6982	GX 3CrNi13-4	EN 10293 / EN10213
1.4317	GX 4CrNi13-4	EN 10293 / EN 10213 / EN 10340 / EN 10283
1.4405	GX 5CrNiMo16-5-1	EN 10293 / EN 10213 / EN 10340 / EN 10283
1.4008	GX 7CrNiMo12-1	EN 10283

Suction Casing - G20Mn5 QT - 600 kg

### MARTENSITIC STAINLESS STEEL ACC. ASTM

Designation	Standard Code
CA15	A 217 / A 487 / A 743
CA15M	A 487 / A 743
CA6NM	A 352 / A 356 / A 487 / A 743



Steam Turbine Casing - G17CrMoV5-10 - upper part 2,800 kg + lower part 2,400 kg  $\,$ 



### AUSTENITIC STAINLESS STEEL ACC. EN

Material number	Designation	Standard Code
1.4308	GX 5CrNi19-10	EN 10283 / EN 10213
1.4309	GX 2CrNi19-11	EN 10283 / EN 10213
1.4552	GX 5CrNiNb19-11	EN 10283 / EN 10213
1.4408	GX 5CrNiMo19-11-2	EN 10283 / EN 10213
1.4409	GX 2CrNiMo19-11-2	EN 10283 / EN 10213
1.4581	GX 5CrNiMoNb19-11-2	EN 10283 / EN 10213

### AUSTENITIC STAINLESS STEEL ACC. ASTM

Designation	Standard Code
CF8	A 351 / A 743 / A 744
CF8M	A 351 / A 743 / A 744
CF3	A 351 / A 743 / A 744
CF3M	A 351 / A 743 / A 744

### FULLY AUSTENITIC STAINLESS STEEL ACC. EN

Material number	Designation	Standard Code
1.3960	GX 2CrNiMoN18-14	SEW 395
1.4538	GX 1NiCrMoCuN25-20-5	SEW 410
1.4565	GX 2CrNiMnMoNbN25-18-5-4	SEW 400

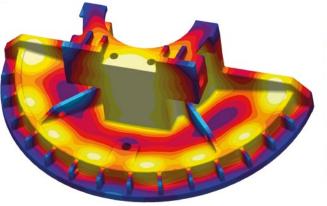
### FULLY AUSTENITIC STAINLESS STEEL ACC. ASTM

]	Designation	Standard Code
	CK3MCuN / UNS S 93254	A 743 / A 744



Joint Middle Piece - G20Mn5 QT - 4,000 kg







### **DUPLEX STAINLESS STEEL ACC. EN**

Material number	Designation	Standard Code
1.4470	GX 2CrNiMoN22-5-3	EN 10283 / EN 10213
1.4468	GX 2CrNiMoN25-6-6	EN 10283 / EN 10213
1.4417	GX 2CrNiMoN25-7-3	EN 10283 / EN 10213
1.4517	GX 2CrNiMoCuN25-6-3-3	EN 10283 / EN 10213
1.4469	GX 2CrNiMoN26-7-4	EN 10283 / EN 10213

### **DUPLEX STAINLESS STEEL ACC. ASTM**

Designation / Standard Code
A 890 / A 995 Grade 1A , UNS J 93370 , CD4MCu
A 890 / A 995 Grade 4A , UNS J 92205 , CD3MN
A 890 / A 995 Grade 5A , UNS J 93404 , CE3MN





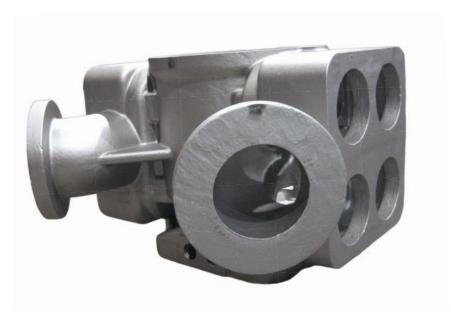




# R



El	ASTM A 469	
Material number	Designation	Type
5.3500	EN-GJSA-XNiCr20-2	D-2
5.3503	EN-GJSA-XNi22	D-2C
5.3501	EN-GJSA-XNiMn23-4	-
5.3507	EN-GJSA-XNiCr30-3	D-3
5.3504	3504 EN-GJSA-XNi35	
5.3509 EN-GJSA-XNiCr35-3		D-5B
5.3505	EN-GJSA-XNiSiCr35-5-2	D-5S



Cylinder Casing for LNG Compressor - EN-GJSA-XNi35 - 4,000 kg





## NI-BASE-ALLOY ACC. ASTM A 494

ASTM A 494		Alloy type	Remarks
UNS No.	Grade		
N08826	CU5MCuC	NiCr21Mo	Alloy 826
N26625	CW6MC	NiCr22Mo9Nb	Alloy 625
N26022	CX2MW	NiCr21Mo14W	Alloy 22
N26059	CX2M	NiCr23Mo16	Alloy 59





Cylinder Casing – G20Mn5N – 5,400 kg  $\,$ 













### **OUR TECHNOLOGY**

- 3 medium-frequency induction furnaces (0.5 t, 1.5 t and 3 t)
- 2 electric arc furnaces with a capacity of up to 10 t and
- 1 VOD plant with a capacity of 7 t.

Castings are manufactured using a mechanical cold-resin moulding plant  $(1,400 \times 1,000 \text{ to } 2,200 \times 1,200 \text{ mm})$  and a classic hand-moulding plant based on the cold-resin moulding process (max. moulding box size:  $4,500 \times 4,500 \times 3,000 \text{ mm}$ ).

Manufacturing equipment encompasses all requisites for heat treatment, testing and secondary treatment for a wide range of products. We process cast parts ready for installation on state-of-the-art CNC machine tools.

### **OUR MARKET**

Key market segments include the construction of industrial valves, pumps and compressors, shipbuilding and railway vehicles. At the same time, components are also supplied for the construction of turbines, hydro power stations and process technology. More than 50 percent of our products are exported to Europe and other international destinations. Our technicians maintain an intensive partnership with our customers. This ensures being involved as early as possible in the development and construction of cast parts in order to comply with all of our customers' requirements in the most optimal way.



### **OUR QUALITY**

Our work is based on a comprehensive quality assurance system. Pleissner Guss GmbH is certified according to ISO 9001, ISO 14001 and ISO 50001. It goes without saying that we also possess different manufacturer approvals issued by a variety of official classification societies such as for the areas of pressure vessels, nuclear technology and railway vehicle components as well as the extensive areas of shipbuilding and offshore technology.

The extensive equipment availed of by our company for non-destructive testing comprises the entire range of surface crack testing and volume testing using ultrasonic and radiation tests. Using a 3 MeV linear accelerator walls up to 200 mm thickness can be examined.

Thanks to test personnel qualified to the SNT-TC-1A and ISO 9712 standards, we are capable of complying with all of the recognised test requirements. Apart from the equipment for non-destructive testing, we also meet all of the requisite requirements for carrying out destructive material tests. Our in-house mechanical laboratory as well as a full range of metallographic equipment enable us to carry out nearly all necessary tests.

This equipment is supplemented by comprehensive systems for examining dimensions including a 3D coordinate measuring machine for components of up to  $3,300 \times 2,030 \times 1,500$  mm in size.











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