

ALLOY 20 / UNS N08020

Other common names: Carpenter 20, 20Cb-3, WP 20CB, Incoloy alloy20, 1.4563

Alloy 20, also known as Carpenter 20, is a Nickel-iron-chromium Austenitic alloy that was developed for maximum resistance to acid attack, specifically sulfuric acid. This superalloy has excellent resistance to general corrosion, pitting, and crevice corrosion in chemicals containing chlorides and sulfuric, phosphoric, and nitric acids. It also contains niobium for stabilization against sensitization and resultant intergranular corrosion. Carpenter 20 combines excellent corrosion resistance with elevated mechanical properties and relatively easy fabrication. Although originally designed for use in sulfuric acid related industries, Alloy 20 is now a popular choice for a wide variety of industries including the chemical, food, pharmaceutical, and plastics industries. In addition, this superalloy is used in heat exchangers, mixing tanks, metal cleaning and pickling equipment, and piping.

There has long been a debate on whether Carpenter 20 is a stainless steel or a nickel alloy because the nickel content is right on the border of defining it as one way or the other. So, depending on who you talk to this alloy may be referred to as alloy 20 Stainless Steel or as a nickel alloy. Either way it is still great for corrosion resistance.

Chemical Composition, %

Ni	Fe	Cr	Cu	Mo	Nb
32.00-38.00	Balance	19.0-21.0	3.0-4.0	2.0-3.0	0.8xC-1.0max
C	Mn	P	S	Si	
0.07max	2.0max	0.045max	0.035max	1.0max	

ASTM SPECIFICATION

Pipe SMLS	Pipe Welded	Tube SMLS	Tube Welded	Sheet/Plate	Bar	Forging /Flange	BW Fittings
ASTM B729	ASTM B464	ASTM B729	ASTM B468	ASTM B463	ASTM B473	ASTM B462	ASTM B366

Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

Product: BW Fittings (Elbow, Reducer, Cap, Tee, Stub Ends)
Standard: ASTM B366

45Deg Elbow



90Deg Elbow



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

Concentric Reducer



Cap



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

Product: Forgings / Flanges
Standard: ASTM B462

90deg Elbow ,SW



Equal Tee,SW



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

Slip-On Flanges



Threaded Flanges



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

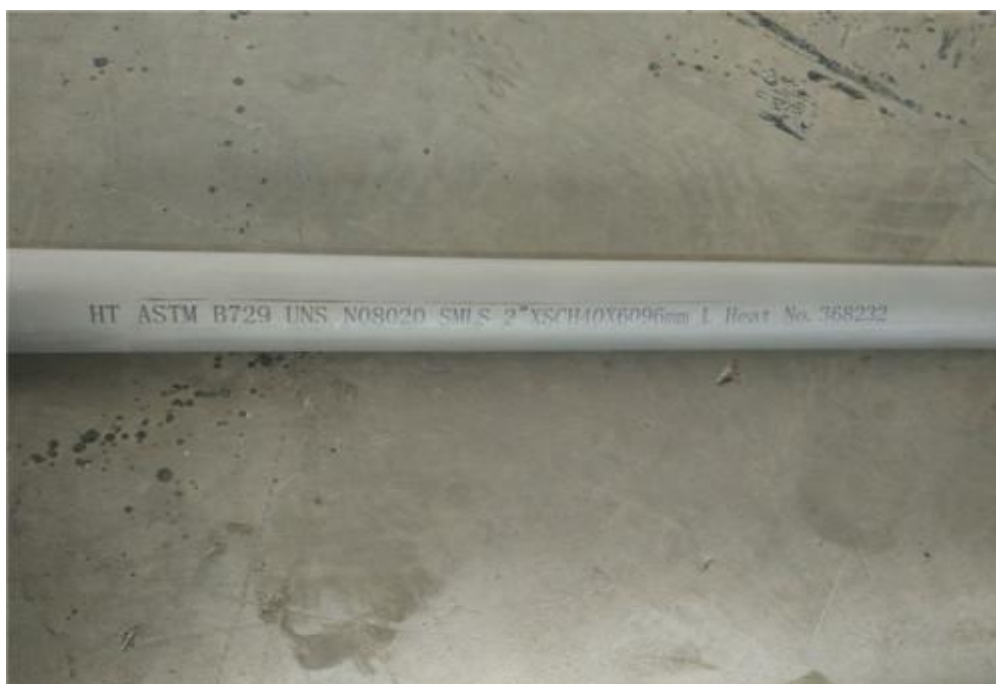
Blind Flanges



Product: Pipe, Tube, SMLS /Welded
Standard: ASTM B729, ASTM B464, ASTM B468



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

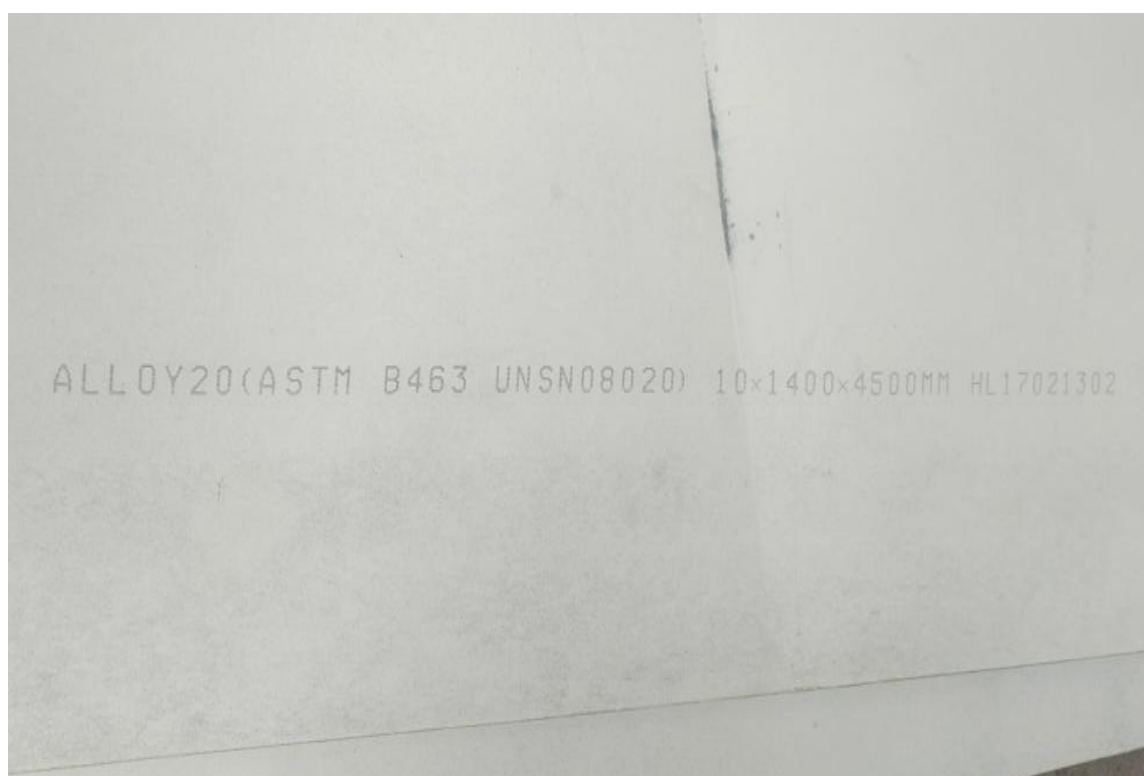
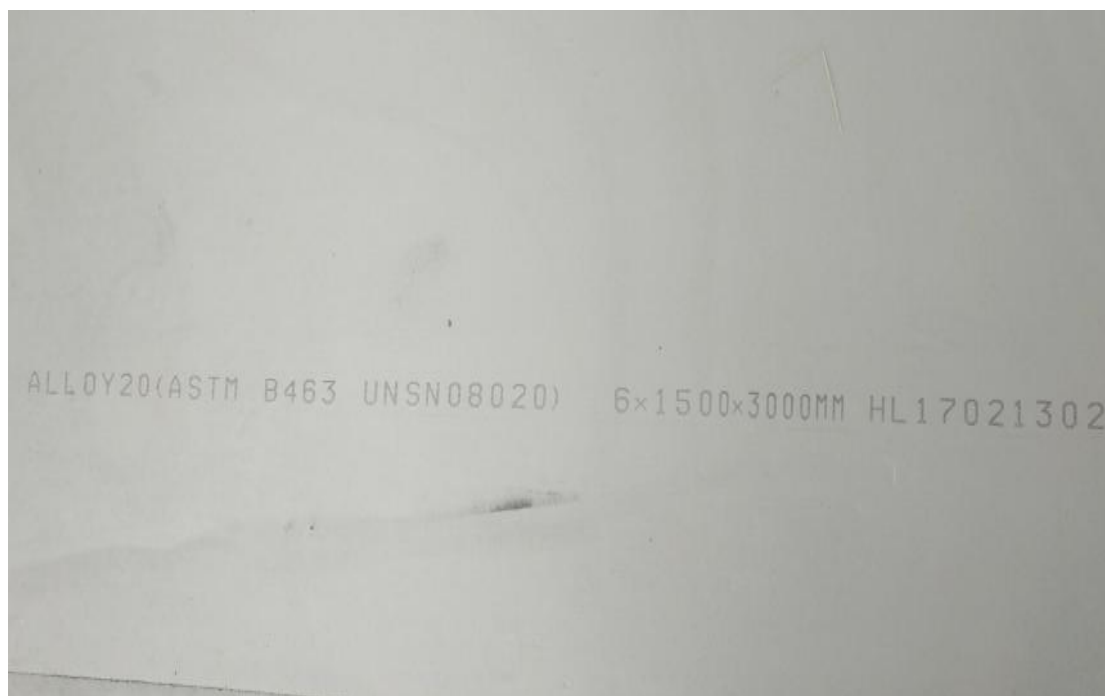


Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

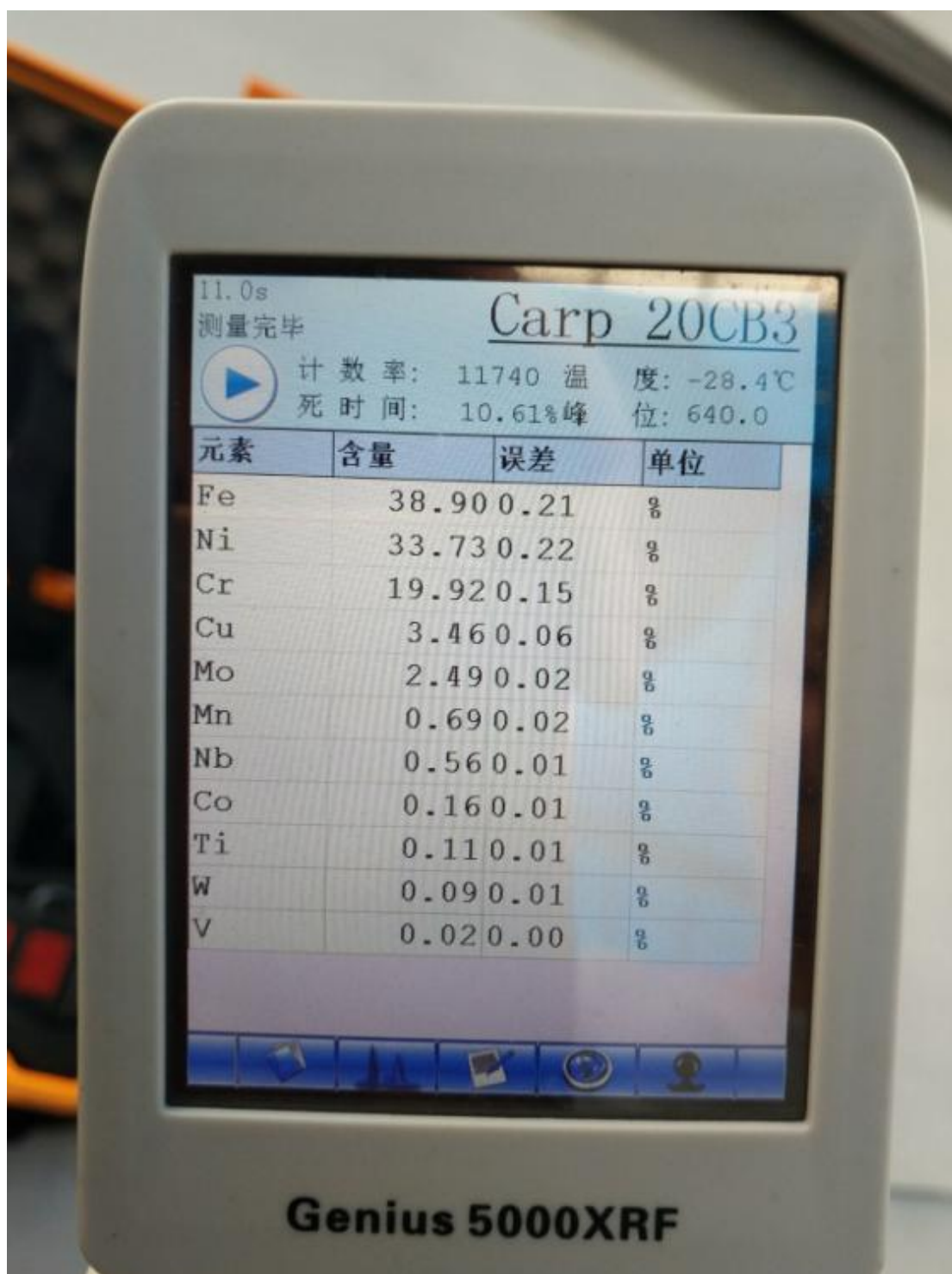


Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

Product: Plate / Sheet / Strip
Standard: ASTM B463

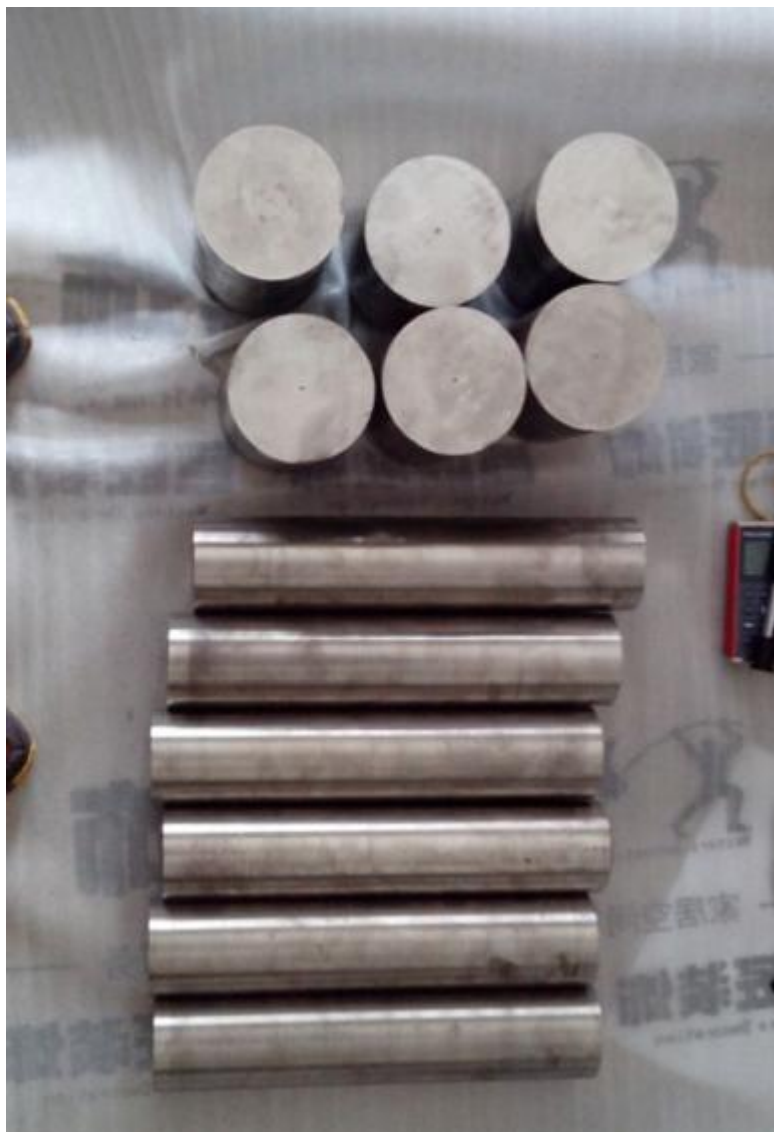


Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

Product: Round Bar /Rod
Standard: ASTM B473



Henan Shuangzhong Intelligent Technology Co. , Ltd.
河南双众智能科技有限公司
Building 1, Hengfeng Technology Innovation Center, Ruyun Road,
Zhengzhou Airport Economic Comprehensive Experimental Zone,
Henan, China
TEL:+86 19069638227 Email:info@manufacturerpipe.com

