

ASTM F594 NUT

STAINLESS STEEL

(TYPE 316 GROUP 2)

MECHANICAL PROPERTIES

CONDITION	ALLOY MECHANICAL PROPERTY MARKING	NOMINAL DIAMETER IN.	PROOF STRESS KSI, MIN	ROCKWELL HARDNESS
AF	F594E	¼ TO 1-1/2 INCL	70	B85 MAX
A	F594F	¼ TO 1-1/2 INCL	75	B65 TO 95 INCL
CW1	F594G	¼ TO 5/8 INCL	100	B95 TO C32 INCL
CW2	F594H	¾ TO 1-1/2 INCL	85	B80 TO C32 INCL

CHEMICAL PROPERTIES

ELEMENT	CHEMICAL COMPOSITION,% MAX (UNLESS MIN/MAX LIMITS GIVEN)
CARBON	0.08
MANGANESE	2.00
PHOSPHORUS	0.045
SULFUR	0.030
SILICON	1.00
CHROMIUM	16.00-18.00
MOLYBDENUM	2.00-3.00
NICKEL	10.00-14.00

F594 316SS NUTS ARE INTENDED FOR USE IN CORROSIVE ENVIRONMENTS. ADDED NICKEL AND MOLYBDENUM GIVE THEM SUPERIOR CORROSION RESISTANCE AND INCREASED TENSILE STRENGTH AT HIGH TEMPERATURES. F594 316SS NUTS ARE SUPPLIED IN A HEX HEAD PATTERN PER ASME B18.2.2 STANDARD FOR SQUARE AND HEX NUTS. THE BOLT NORMALLY USED WITH A F594 316SS NUT IS A F593 316SS HEX BOLT.

NOTE: PROPERTIES AND APPLICATION PARAMETERS ARE TYPICAL AND ARE PRESENTED IN GOOD FAITH BUT NO WARRANTY IS EXPRESSED OR IMPLIED.