



## 420 MOD PH

### Chemical Composition (Typical Values Weight %)

<u>C</u>	<u>Si</u>	<u>Mn</u>	<u>S</u>	<u>Ni</u>	<u>Cr</u>	<u>Cu</u>	<u>N</u>
0.05-0.07	0.15-0.40	1.20-1.40	0.12	0.50	12.0-12.6	+	+

### Characteristics

**420 Stainless Modified Pre Hard** is a pre-hardened, low carbon, corrosion resistant steel.

It is supplied in the pre-hardened condition at approximately 290-330 HB, offering improved machinability and corrosion resistance.

### Applications

**420 Stainless Modified Pre Hard:** For use in holder plates, backing plates, cavity and ejector plates. Great for plastic/vinyl extrusion dies, unpolished inserts and dies.

Test thickness ( <i>inch</i> )	Test hardness	Yield strength ( <i>ksi</i> )	Tensile strength ( <i>ksi</i> )
100 mm (3.93)	310 HB	890 N/mm <sup>2</sup>	1000 N/mm <sup>2</sup>

		25°C/77°F	100°C/212°F	200°C/392°F	300°C/572°F
Thermal expansion coefficient (from 25°C)	10 <sup>-6</sup> /K		10.6	10.7	10.9
Thermal conductivity	W/mK Btu in/(ft <sup>2</sup> h°F)	27.4	28.3	28.2	28.0
Young modulus	kN/mm <sup>2</sup>	205			

For more information, contact:

**STURDELL INDUSTRIES, INC.**  
**1529 Lyell Avenue**  
**Rochester, NY 14606**

**E-mail quotes:** [quotes@sturdell.com](mailto:quotes@sturdell.com)  
 (Please supply CAD files in .dwg or .dxf format)

**Phone** (585) 464-0800  
**Toll Free** (888) 783-3584  
**Fax** (585) 464-0030  
**Web** [www.sturdell.com](http://www.sturdell.com)