

***Drill Rod & Tool Steels, Inc.***

***3700 North River Road  
Franklin Park, IL 60131***

***847-678-4400 Phone***

***847-678-5477 Fax***

***ANALYSIS REPORT***

***HOT WORK TOOL STEEL.***

***AISI H13  
ASTM A-681  
MIL. SPEC QQT-570a  
ANNEALED***

<b>CHEMICAL ANALYSIS:</b>	<b>LIMITS.</b>	
<b>C CARBON</b>	<b>.30</b>	<b>TO .45%</b>
<b>Si SILICON</b>	<b>1.00</b>	<b>1.20</b>
<b>Mn MANGANESE</b>	<b>.30 typical</b>	
<b>V VANADIUM</b>	<b>.80</b>	<b>1.20</b>
<b>Cr CHROMIUM</b>	<b>4.75</b>	<b>5.50</b>

**QUENCHING MEDIUM: STILL AIR**

**HARDNESS RANGE: 35 TO 55 Rc.**

**HEAT TREATMENT: Typical.**

**HARDENING TEMPERATURE 1850 TO 1925° F.**

**TEMPERING TEMPERATURE 950 TO 1150°F.**

**ANNEALING TEMPERATURE 1500 TO 1550°F.**

**MATERIAL FURNISHED IN THE ANNEALED CONDITION. UNDER 229  
BRINELL**

**ALL MATERIAL IS DFARS COMPLIANT**