



# SUPER GRADE

AW R&O Hydraulic SERIES

**CHAMPION SUPER GRADE AW R&O HYDRAULIC FLUID** series are high performance anti-wear hydraulic oils designed to satisfy a wide range of hydraulic equipment requirements. They meet the stringent requirements of severe hydraulic systems using high pressure, high output pumps as well as handling the critical requirements of other hydraulic system components such as close clearance servo-valves and the high accuracy numerically controlled (NC) machine tools.

- Extend oil/filter life
- Optimize equipment protection
- Reduce maintenance and product disposal costs.

Formulated with high quality base oils and a super-stabilized additive system that neutralizes the formation of corrosive materials. They are designed to work with systems operating under severe conditions where high levels of antiwear and film strength protection are desired.

Meets, or exceeds, the following performance specifications;

- FZG Gear Test, DIN 51354 - Fail Stage
- DIN 51524 Part 2 (2006)
- ISO 11158 L-HM (2006)
- Cincinnati Machine P-68 (ISO 32), P-69, (ISO 46) & P-70 (ISO 68)
- Vickers I-286-S
- Vickers M-2950-S
- Denison HF-0, HF-1, HF-2

If maximum performance is desired over longer periods between maintenance, try Champion's Quantum series hydraulic fluids.

### TYPICAL SPECIFICATION

ISO Grade	SG 22	SG 32	SG 46	SG 68	SG 100	SG 150	SG 220
<b>Product Code</b>	<b>4179</b>	<b>4245</b>	<b>4180</b>	<b>4181</b>	<b>4178</b>	<b>4212</b>	<b>4195</b>
MSDS #	1200	1200	1200	1200	1200	1200	1200
Color	Amber	Amber	Amber	Amber	Brown	Brown	Brown
Gravity API @ 60° F	32.3	30.6	30.0	32.4	34.4	29.7	27.4
cSt @ 40°C	22	32	46	68	100	150	220
cSt @ 100°C	4.2	5.3	6.7	8.5	10.9	14.0	19.0
SUS @ 104°F	100	149	213	311	470	680	1080
SUS @ 212°F	40	44	48	55	62	74	94
Viscosity Index	95	95	95	95	92	92	90
Pour Point ° F	-28	-24	-22	-22	-18	-18	-18
Flash Point ° F	378	402	415	415	460	460	470
Dielectric Strength, D-877, kV	46	52	52	52	-	-	-

Call Our Friendly Sales Representatives for Available Package Sizes

4179    4245    4180    4181    4178    4212    4195

EFFECTIVE 11/08

**CHAMPION BRANDS, L.L.C. • 1001 Golden Drive • Clinton, MO 64735**  
**ORDER DESK 800-821-5693**