

ストレート型超耐久仕様タイプ1蓄圧器

Type1 steel pressure vessel (Ultra durability model)

優れた水素中疲労特性を有し、使用年数は無制限。容量や設計規格もお客様のご要望に対応致します。

Superior fatigue durability under cyclic operation and No limitation of useable years.

Variable volume capacities, sizes and design codes (KHK or ASME) can be applied by customer's request.

U Ultra durability model [Since FY2013-]

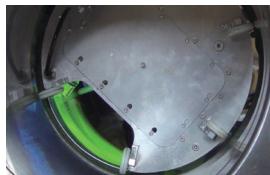
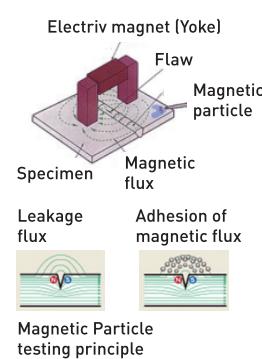


Photo : 300L

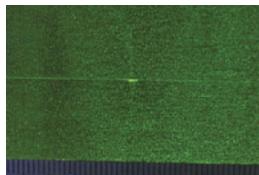
1 High reliability inspection

出荷時検査には磁粉探傷法(JIS Z2320-1)を適用。
ごく微小な傷や欠陥も見逃しません。

Magnetic particle testing (MT) JIS Z2320 for entire internal surface is applied. We make sure that there is no such a small surface defect existing on the internal surface before shipping.



Semi-Automated MT equipment running through internal surface

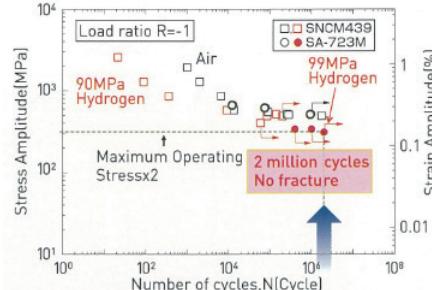


MT indication of 0.4mm depth and 1.2mm length

2 Material testing in hydrogen

Fatigue test 高純度かつ焼入れ性に優れたSA723鋼を
使用しており、疲労寿命は水素の影響を受けません。

JSW's high purity, high hardenability ASME SA-723M steel demonstrated that fatigue limit is not affected by hydrogen.



Fatigue crack growth test 水素ガス中でも
き裂は成長しません。

With internal high-durable-forming,
no crack growth in hydrogen was demonstrated.

High-durable-forming
No crack growth



No durable forming
H fatigue crack



Fracture surface of cylinder specimen tested under 99MPa hydrogen.