
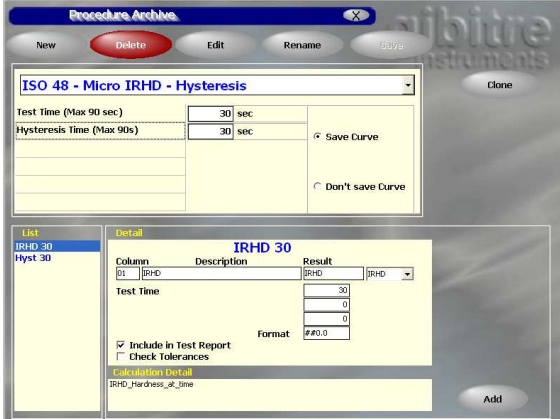



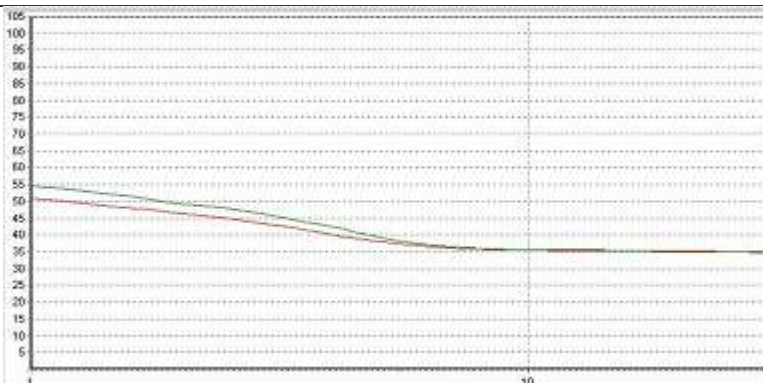


6. CALCULATED RESULTS

IRHD				
Label	Description	Base Unit	Example of Graph	Reference Standard
IRHD_t	<p>IRHD Hardness at the end of the test time Standard test time is 30 seconds. Different test time can be entered in the test procedure It is possible to enter in the same test procedure multiple readings at different test time</p>	IRHD	 	ISO 48
HYST_t	<p>IRHD reading the end of the test + Hysteresis times The Hysteresis curve is produced by removing the test load from the indenter. During hysteresis time only pre-load force is applied on the indenter. The duration of the hysteresis test can be entered in the test procedure. The time at which the reading is done can be selected and is independent from test time. It is possible to enter in the same test procedure multiple readings at different test time</p>	IRHD	 	ISO 48
T	<p>Thickness of the sample This test result is available only with Micro-IRHD tester with laser sample centring device</p>	mm		

SHORE				
Label	Description	Base Unit	Example of Graph	Reference Standard
SH_t	Shore Hardness at time t	Shore		ISO 868
SH_INI	Shore A reading at the end of the application of the weight (maximum shore reading at test start)	Shore		

REGRESSION ANALYSIS				
a	Angle coefficient of the regression curve of hardness vs Log_time	num		ISO 48
r	Correlation Coefficient of the regression curve of hardness vs Log_time	num		

7. STATISTICAL CALCULUS

Calculation	Formula Used
Mean (Xm)	$Xm = \Sigma(Xi) / n$
Standard deviation (σ)	$\sigma = \Sigma(Xi - Mean)^2 / (n - 1)$
Maximun	$Max(Xi)$
Minimal	$Min(Xi)$
Cp	$Cp = \frac{TollSup - TollInf}{6 * \sigma}$
Cpk	$Cpk = \frac{TollSup - Xm}{3 * \sigma}$ Or $Cpk = \frac{Xm - TollInf}{3 * \sigma}$ (write the most unfavorable)

Xi=Result
N = Number of results

Toll Sup: Upper limit of set up tolerance
Toll Inf : Lower limit of set up tolerance