GOLD WIND ENGINEERING (S) PTE LTD

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EMAIL: SUPPORT@GW-ENGINEERING.COM

Gold Wind Engineering (S) Pte Ltd
Rack Ultrasonic Scan Inspection

Title: **Rack Ultrasonic Scan Inspection**
Service Code : 00-SVS-RUSI
Project Design Team : **EDWARD ONG / TONG BOON YIK**

Date: **01 Aug 2019**

JOB SCOPE

Inspection	: Analysis condition of beam & Thickness through Ultrasonic technology.
Equipment	: Ultrasonic Scanner
Method of Test	: Echo to Echo Through Coat / corrosion gaging.
Result of test 1	: Dual element corrosion gaging.
Result of test 2	: echo-to-echo true metal thickness
Report of Test	: Survey Measurement Data Report
PE Endorsement	: Certify Test Data Information & Equipment Calibration Test Certificate
Test Point	: Max 60 test point @ Tip Diameter 11mm
Environment Temp	: 1°C ~ 30C°

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"Smart Space Smart Storage"

SOCOTEC CERTIFICATION INTERNATIONAL
ISO 9001
SS 506 PART 1
BS OHSAS 18001
SAC ACCREDITED CERTIFICATION BODY
Cert No: QS-1999-05
Cert No: OSH-2008-01

bizSAFE STAR

BCA REGISTERED CONTRACTOR
CR4 & B2

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About Us

Gold Wind Engineering (S) Pte Ltd was established in 2011. We provider that delivers material handling products and services to our clients throughout Singapore. Primarily focussing on all kind of storage racking and Warehouse safety inspections, you will find that our services of your storage equipment to a standard.

We specialize in the design, fabrication, installation of storage racking systems. Our company has also started expanding with more professional installation team. This is just the beginning, we are on our way to becoming a first level professional producer of storage logistics equipment in Singapore.

Our Vision

To provide excellent customer service and become the preferred choice of the supplier

Our Mission

The enhancement of safety standards throughout the pallet racking industry. Where there are costs we will find reductions, problems, we shall seek solutions, confusion bring clarity and doubt we shall bring understanding

Why Choose Gold Wind Engineering?

We believe experience is just as important as knowledge. We possess both knowledge and practical experience to provide excellent services to our client.

- High Trained Gold Wind Installation Team
- In-house safety practise weekly.
- Designed & built experience more than 18 Years.
- Ex- Stock in Singapore & Malaysia
- Re-Design our client current racking to new warehouse
- Quickly Sales Response to client.

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45MG Ultrasonic Thickness Gage
Simple, Rugged, and Reliable Operation

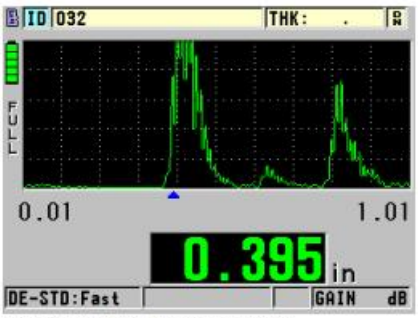
The 45MG advanced ultrasonic thickness gage is packed with standard measurement features and software options. This unique instrument is compatible with the complete range of Olympus dual element and single element thickness gage transducers, making it an all-in-one solution for virtually every thickness gage application.

Built for Tough Environments

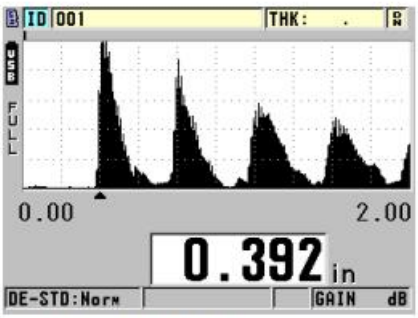
- Rugged, designed for IP67
- Explosive atmosphere: tested using MIL-STD-810G, Method 511.5, Procedure I
- Vibration tested using MIL-STD-810G, Method 514.6, Procedure I
- Drop tested using MIL-STD-810-G, Method 514.6, Procedure IV
- Shock tested using MIL-STD-810G, Method 516.6, Procedure I
- Wide operating temperature range
- Optional protective rubber boot with gage stand

Designed for Easy Operation

- Simple keypad for right hand/left hand operation
- Easy operator interface with direct access to most functions
- Internal and removable microSD memory card storage
- USB communication port
- Optional alphanumeric data logger with 475,000 thickness readings or 20,000 waveforms
- Default/Custom single element transducer setups (optional)
- Password protected instrument lock
- Color transflective QVGA display with indoor and outdoor color settings for superior clarity



Indoor display setting, optional A-scan mode



Outdoor display setting, optional A-scan mode

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Thickness Measurements on Internally Corroded Metals

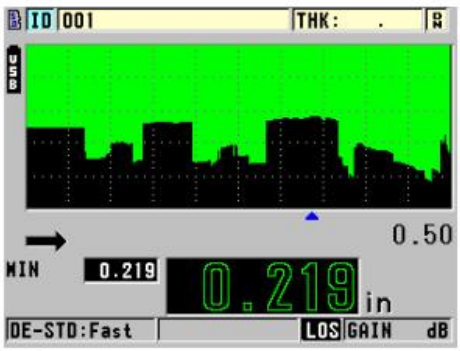
Using Dual Element Transducers

One of the major applications of the 45MG is measuring the remaining thickness of pipes, tubes, tanks, pressure vessels, ship hulls, and other structures affected by corrosion or erosion. Dual element transducers are most commonly used for these applications.

- Automatic Probe Recognition for standard D79X series dual element transducers
- Calibration doubling warning when echo doubling may occur during calibration
- The echo-to-echo / THRU-COAT® technology option enables measurements on painted and coated surfaces
- High-temperature measurements; up to 500 °C (932 °F)

B-scan Mapping (Time-Based)

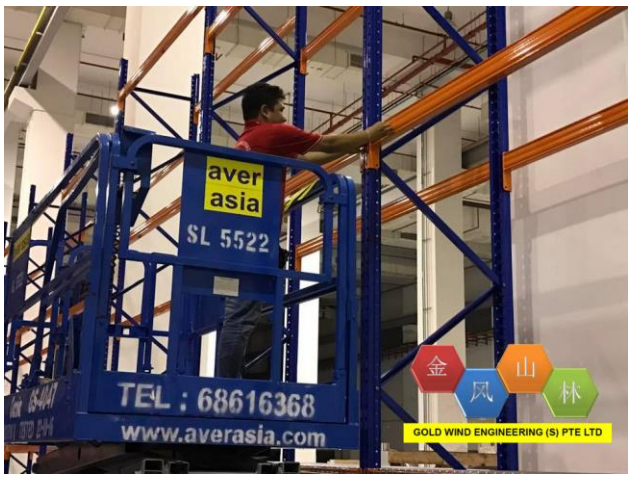
The 45MG gage B-scan feature converts live thickness readings into cross-sectional images drawn on the display. This standard feature is very helpful in viewing the changes in thickness measurements over a distance. The B-scan is activated as soon as the transducer makes contact with the surface of the material. The Freeze Minimum function is used to display the minimum thickness of the scanned area. The optional 45MG datalogger can store up to 10,000 thickness readings in a single B-scan.

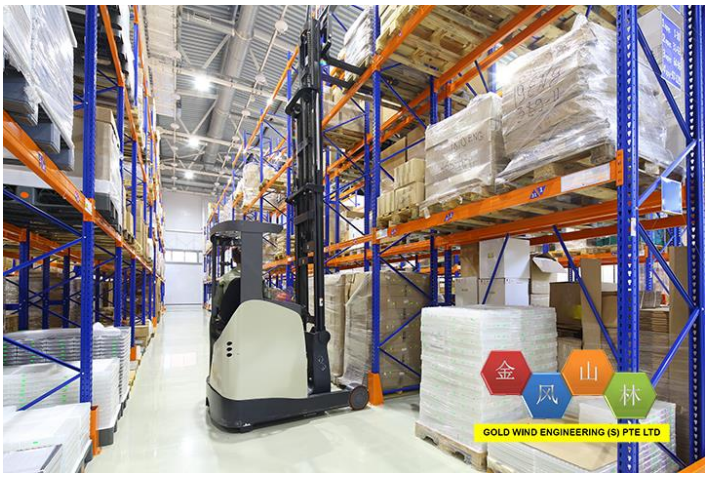


High-Temperature Surfaces

The 45MG gage is ideally suited for making stable thickness measurements on hot material surfaces (up to 500 °C or 932 °F) with the D790 series transducers (D790, D790-SM, D790-RL, and D790-SL). The Zero Compensation feature enhances the accuracy of measurements on hot surfaces by compensating for temperature changes in the transducer delay line due to thermal drift.

D790-SM transducer on a high-temperature pipe





Identify Unqualify Materials or Corroded Cross beam

Gold wind provide manpower equipment to check through the materials by using Ultrasonic Scanner to check thickness & corrosion gaging.

Work Process.

1. Using Ultrasonic scanner ensure all thickness of cross beam are uniformly same thickness.
2. Using Dual Element Transducers check structures affected by corrosion or erosion.
3. Paste point sticker on the cross beam to identified location has been tested.
4. Paste Do Not Use sticker for those suspected corroded beam or nonuniformly thickness beam

Note :

Gold Wind can provide manpower check up to 7.5 meter high.
Additional charge of the Scissor lift If Jobsite required for work at high

Mode: GS-1530 & GS-1930
Battery Operated
Max Height : 5.97 meters

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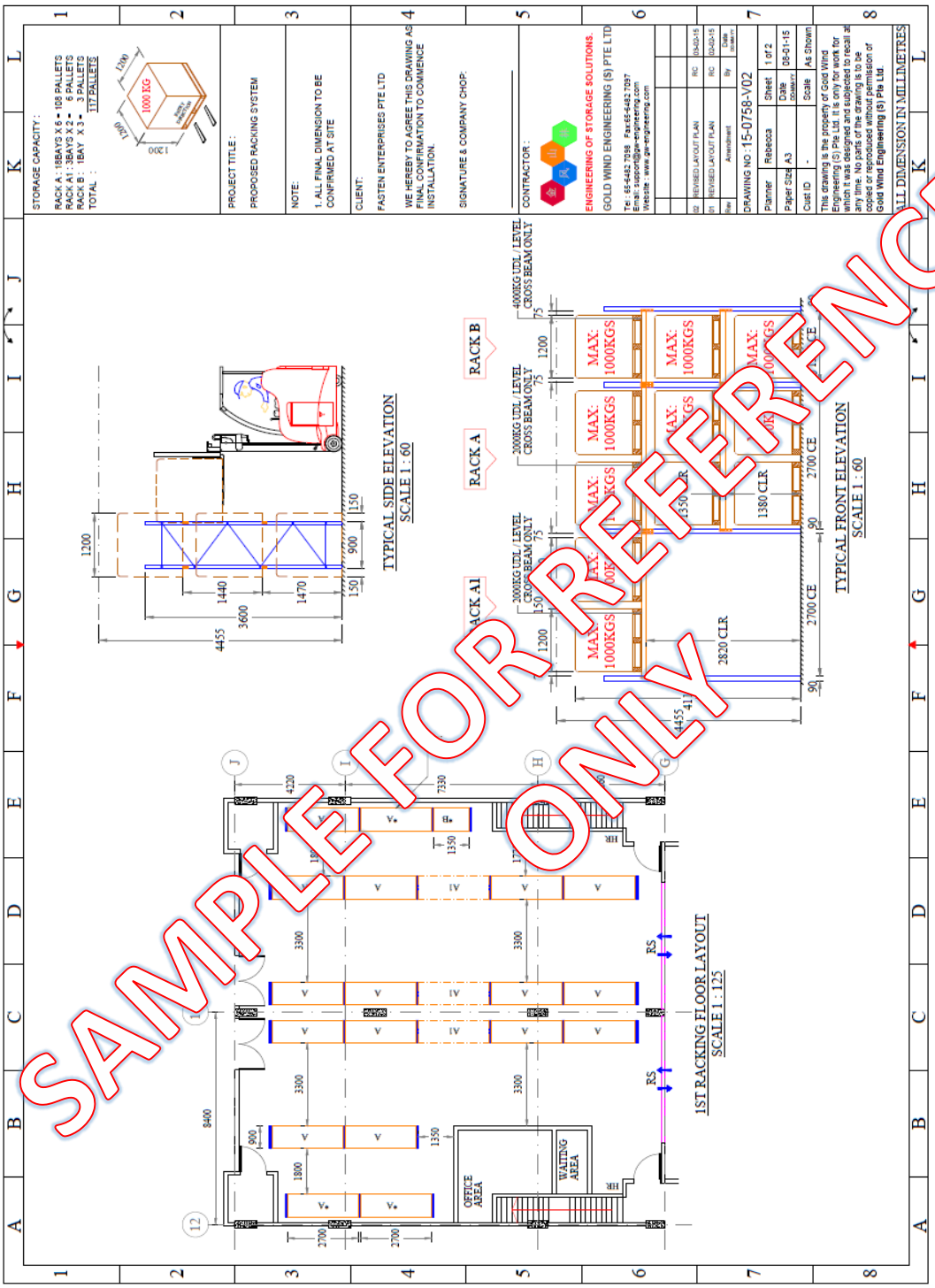

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SAFETY LOAD CHART

CONDUCT REGULAR INSPECTION TO CHECK FOR
CORRECT APPLICATION AND USE
LOAD WITHIN ALLOWABLE SAFE LIMITS
ACCIDENTAL DAMAGE
DISLODGEMENT OF STRUCTURES COMPONENTS

USE ONLY PALLET OF BEST QUALITY

THE USE OF NON RETURN PALLET
BROKEN PALLET IS STRICTLY FORBIDDEN

DO NOT CLIMB ON PALLET RACKING WITHOUT
PROPER SAFETY EQUIPMENT

DO NOT ALTER THE STRUCTURE WITHOUT EITHER
* CHECKING EFFECTS AGAINST
* MANUFACTURER'S TECHNICAL DATA
OBTAINING APPROVAL FROM SUPPLIER

REPORT DAMANGED TO PERSON RESPONSIBLE

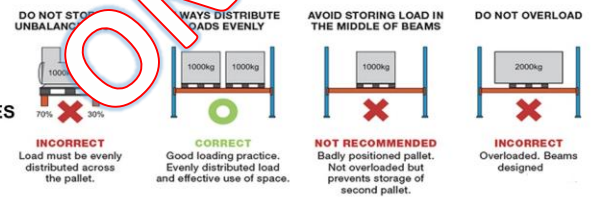
REMOVE ALL GOODS OR LOAD ON DAMAGED RACK

PE CALCULATION AGAINST BUILDING FLOOR LOAD
VISUAL INSPECTION & REPORT ONCE A YEAR
REPLACE DAMAGED COMPONENTS REGULARY
CORROSION INSPECT EVERY 5 YEAR
ADD ON SAFETY PROTECTION PRODUCT

LOADS IN KILOGRAM (KG)

DESIGN STANDARD

1. AS4084-2012 STEEL STORA[illegible]CKING
2. AS/NZS 1170.4-2002 EA[illegible]CTION
3. AS 4600-2005 COLD FOR[illegible] STEEL STRUCTURES
4. AS 4100-1998 ST[illegible]RUC[illegible]RES
5. AS/NZS 1554[illegible] ELDING OF STEEL



SPECIALIST CONTRACTOR

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Welcome to Gold Wind Engineering (S) Pte Ltd

Engineering of Storage Solutions

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CALL US NOW
FOR PRICE ESTIMATION

ENHANCE YOUR WAREHOUSE SAFETY TODAY EVERY OF YOUR STAFF ARE IMPONTANT TO YOUR BUSINESS !!!

THANKS YOU

Warehouse:
No. 39 Woodlands Close,
Mega@Woodlands,
#03-23/24 Singapore 737856

Business Hours:
Monday to Friday : 8:00am to 6:00pm
Saturday : 8:00am to 12:00pm
Sunday & PH : OFF

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