

RAW MATERIAL TESTING

Document:- Material testing challan

Details:- IIS have a full fledged Lab. Department equipped with complete material testing facilities (both chemical & physical). Lab has complete metallurgical testing facilities of iron, ferrous and non ferrous alloys and metals with a team of very qualified and professional persons.

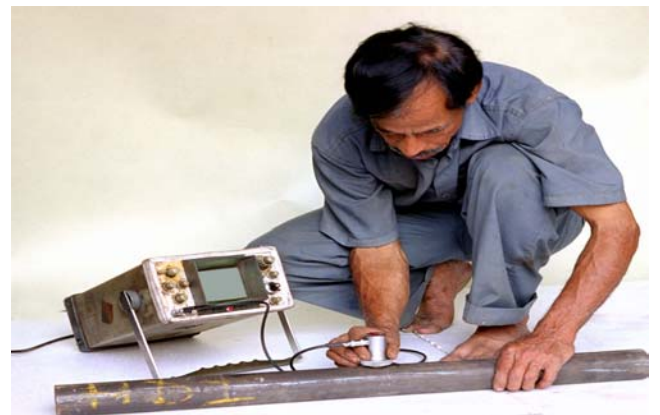


Chemical Testing by Weight Analysis

TESTING FACILITIES

Physical :- Vernier, Micro meter, Ultrasonic, Hardness tester etc.

Chemical :- Chemical compositions, Carbon sulphur determinator, drying oven, muffle furnace etc.



Ultrasonic Crack Detection

QUALITY IS OUR PRCEDENCE

PRODUCTION PLANNING

Document :- Work order slip, schedule vs dispatch.

Details:- The ultimate aim of production planning is to formulate production plans for dealing with the future uncertainties. We do production planning with help of following reference,

1. Operations to be performed
2. Capacities of machines
3. Raw material required
4. Machines Required
5. Tools, jigs & fixtures
6. Sequence of operations
7. Time required to set up or prepare for them.
8. Manpower required
9. Allowable manufacturing tolerance.

Our production planning department is equipped with full-fledged information with regard to the following

- Type of process & material specifications.
- Normal & max. installed capacity.
- Order in hand and data of delivery.

FACILITIES

IIS do the strong production planning by keeping in mind the production capacity & delivery terms supported by young , and very experienced engineers. [As we have in house facilities for every process so it also helps us in to build a successful production planning.](#)



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MANUFACTURING OF PRODUCT

Document :- Work order slip, Die register, In process control sheet, Maintenance register, Review & Disposition of non conforming products.

Details :- IIS have a huge manufacturing capacity organized by well experienced engineers and trained working.



Milling Machine

MANUFACTURING FACILITIES

A full-fledged conventional machine shop equipped with latest lathe machines in excellent condition, shearing m/c, centrifugal finishing m/c, power hacksaw, bench drilling m/c, etc.



Coils Springs

QUALITY IS OUR PRCEDENCE

COILING & END GRINDING

Document :- In process inspection report

Details :- IIS have a very modern in house coiling shop with support of very experienced and professional persons to serve the customer's requirements and their needs with best quality.



Automatic Coiling machine



Automatic Coil Machine upto 8.0mm

FACILITIES

Automatic coiling machines, semi automatic coiling machines and all other facilities which are required for manufacturing the highest quality of springs.

MACHINING

QUALITY IS OUR PRCEDENCE

Document :- In process Inspection Report

Details :- IIS have in house machine shop facility which helps to confirm the desired quality as per customer's requirements. With the help of our machine shop & tool room we are able to **DEVELOP JIGS & FIXTURES** necessary to test & ensure the best quality of our product .
Our vast experience in supplying over 10000nos. of thrust bearing springs to you gives us additional leverage to ensure the quality of our product.



Machine Shop

A modern machine shop equipped with latest conventional lathe machines, universal milling machines, surface grinding, shapers etc..

(All measuring equipments and instruments are well calibrated and well maintained)



Rotary Surface Grinding

FACILITIES

HEAT TREATMENT

QUALITY IS OUR PRCEDENCE

Document :- Heat treatment register

Details :- IIS have a very modern in house heat treatment facility with support of very experienced and professional persons to serve the customer's requirements and their needs with best quality.

1. **Stress Relieving** :- Stress relieving is done in the electric furnace with forced air circulation at 300deg. and raised to 600 deg. and soaked for 60 minutes and then cooled in the furnace itself up to 300deg.
2. **Hardening** :- Pre heating is done at 500 deg. for 1 hr. and then pre heated material is loaded in the salt bath furnace and soaked at 860 deg. for 45 minutes.
3. **Quenching**:- After sufficient soaking we quenched the job in thermal bath at 160 deg. and soaked at 200 deg. for 1 hr.
4. **Tempering**
 - First tempering is done at 410 degree for 90 minutes.
 - Second tempering is done at 420 degree for 120 minutes.

Hardening furnace up to 900deg. Tempering furnace up to 600deg. Aust tempering furnace (24" x 24"), tempering furnace with **PID Controller and computer graphs.**
Etc.



Heat Treatment Shop

FACILITIES

SCRAGGING

QUALITY IS OUR PRCEDENCE

Document :- Final Inspection Report,
Work order slip.

Details :- IIS have in house scragging facility which helps to confirm the desired quality as per customer's requirements. As 100% scragging is done of all springs and it is confirmed that there should be no permanent set in springs.

We have developed fixtures to ensure the springs are not deformed (squareness & parallelism) during scragging.



100 ton Universal Testing Machine

Scragging machine, Universal
Testing Machine (0 to 100 tones)



**Magnaflux Crack Detector
Machine**

FACILITIES

QUALITY IS OUR PRCEDENCE

LOAD TESTING

Document:- Work slip in process control sheet.

Details:- IIS have a very modern load testing (calibrated) machines supported by qualified and experienced engineers in order to achieve high quality of product.

FACILITIES

Digital load testing machines of 0-10kgs, 0-100kgs, 0-2 tones, 0-3 tones, [0-100 Tones](#) etc.

All measuring instruments & equipments used for load testing like dial plunger, slip gauges, load cell, sensors are well maintained and calibrated.



QUALITY IS OUR PRCEDENCE

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