

# BASIC COMPONENT IN WELDING COST & ESTIMATION

1	<b>MATERIAL</b>	Metal and others
2	<b>CONSUMABLE</b>	Electrode, filler, wire, flux, gas, disc, others
3	<b>POWER</b>	Electrical consumption, fuel cost
4	<b>LABOUR</b>	Welder, fitter, rigger, assistant, supervisor, designer, Engineer, Manager
5	<b>PREPARATION</b>	Joint preparation, bevelling, cutting, Pre-treatment
6	<b>MACHINE COST</b>	Welding, cutting, machining, turning, milling, spare
7	<b>NDT &amp; INSPECTION</b>	NDT (X-ray, dye pent, MPI), visual, mechanical test, inspector
8	<b>FINISHING</b>	Blasting, painting, coating, galvanizing, heat treatment
9	<b>TRANSPORT &amp; MATERIAL HANDLING</b>	Packaging, delivery, loading, crane Mileage claim, Lodging cost, Food, insurance
10	<b>SUB-CONTRACT &amp; OTHER SERVICES</b>	Invoice from sub-contractor
11	<b>ALLOWANCES OVERHEAD CONTIGENCIES</b>	EPF, Insurance, Medical, Overtime Premise, Utility, Management, Secretariat, Communication Repair, maintenance, risk
12	<b>PROFIT</b>	10% to 100%
13	<b>TOTAL COST</b>	Summation of all above

## COSTING RATES

- 1 **Cost of using welding machine per hour**
- 2 **Cost of power consumption per hour**
- 3 **Cost of welding consumable per hour**
- 4 **Cost of machine, equipment and facilities cost per hour**
- 5 **Cost of cutting process per hour**
- 6 **NDT cost per test**
- 7 **Destructive testing cost per piece**
- 8 **Labour and supervison cost per hour**
- 9 **Documentation cost per test**
- 10 **Overhead cost**