

SMITH WELDING AND FABRICATION

Since 1985, Smith Welding and Fabrication has worked closely with engineers and designers to produce machined parts, finished components, and assemblies. We deliver precision, high-quality metal work for the following industries:

- Oil and gas – drilling rigs, pump frames, and components
- Mining – ladders, frames, bumpers, and other add-ons for heavy machinery
- Electrical generation, including wind energy – components for wind turbines and power stations
- Construction – crane components
- Telecommunications – towers and antennae

Smith welding and Fabrication meets your specifications on every job. How? We carefully check every work piece, machine tool, and inspection gauge during each stage of manufacturing. Our welders are fully certified and highly experienced. They carefully check their own work before our quality control inspector checks it. Any piece that is out of tolerance is immediately re-done before what customers expect: high-quality work.

We use the best tools and instruments.

- Our quality-control lab is temperature controlled, so our gauges and instruments always meet certification standards.
- Our coordinate measuring machine (CMM) has a 200 x 150 cm. table, a vertical range of 120 cm, and can measure parts weighing up to 3000 kg to $\pm 100 \mu\text{m}$ in each linear direction.
- The best set of tools an inspector can have is his eyes. All completed welds are visually checked throughout the process.

1. Skim the text. Put the headings in the correct place.

- a. Quality tools and instruments
- b. Serving industry
- c. Guaranteed accuracy – every time.

2. Read the text again. Find words with these meanings.

Paragraph 1

(n) components

(n) parts joined together

Paragraph 2

(adj) having a formal qualification to do a job

Paragraph 3

(n) procedures or measurements that ensure quality by agreement to use them within an industry

(n) number, usually used in pairs, to check the position of a point

(adj) in a straight line

(adv) done with the eyes.

3. Look again at the second and final paragraphs. Answer the questions.

- a) What do welders do to solve problems before they occur?

- b) Why do you think a temperature-controlled room is important?

- c) What is the heaviest part the CMM can handle?

- d) What is the maximum depth it can measure?

- e) According to the text, what is the most important tool an inspector uses?

4. Welded items are all around us. Can you find five welded products where you are right now?