



Unit 13 Getting to know cutting and non-cutting operations

Task 03

- Announcer: Listen to Lisa and Tim talking about cutting and non-cutting operations.
- Lisa: We're learning about so many different technical operations in vocational school at the moment.
- Tim: Yes, you're right! Take cutting operations, for instance, we've learned to separate them into two different processes. Do you remember what they are?
- Lisa: Easy! Cutting and non-cutting operations.
- Tim: That's right. And do you know the difference between these two?
- Lisa: Of course. ... Cutting operations produce chips during the operation. Non-cutting operations don't.
- Tim: What different cutting operations do you know? Give me some examples.
- Lisa: Is this a test?
- Tim: No, not really. But I'm interested in how many different cutting operations you can list.
- Lisa: Ok, then. ... Drilling, milling, turning and sawing are cutting operations by using geometrically defined cutting edges. Grinding and lapping are also cutting operations, but by using geometrically undefined cutting edges.
- Tim: Very impressive. I notice that you've paid attention in vocational school.
- Lisa: And what about you? What examples of non-cutting operations do you know? Let's hear from you now.
- Tim: That's easy. Stamping, scissoring and punching are typical non-cutting operations. Furthermore, water-jet cutting, laser-cutting and etching. No chips are produced during the operation.
- Lisa: I see you've also been paying attention to your lessons in vocational school, Tim. Well done! By the way, I really love water-jet cutting ... would be great to learn more about it.