



From Good to Great

Enhancing the Training Experience for New Technicians



BY RICK SCHULTZ

The most challenging aspect of training new technicians is effectively recruiting and hiring individuals who genuinely want to learn. The first five days are crucial in setting the tone for the entire training program.

Implementing the following strategies will promote training success:

1. Create a welcoming atmosphere – Consider creating welcome signs and a warm environment so new technicians feel valued from day one.
2. Provide preboarding details – It is important to set the stage for new-employee training success by sending a welcome email with key details such as the start time, schedule, team introductions, and login credentials. Set up necessary equipment ahead of time, including software access and security tokens, and consider adding a welcome message on employee laptops computers.
3. Assign mentors – Pair each new hire with an experienced mentor to guide them through their initial training.
4. Provide a personal touch – Encourage managers and supervisors to take new employees to lunch during their first week to foster good relationships and a sense of belonging.
5. Conduct daily check-ins – Connect with new employees at the end of each day to discuss their experiences and address questions.
6. Assign structured homework – Give employees brief but specific tasks to read, study and memorize after their day of training.
7. Provide hands-on observation – During the first week, have the mentor take the new technician into surgery to observe procedures and examine the setup of the Operating Room.
8. Encourage documentation of training – Create a logbook where staff can document their training experiences and milestones.
9. Avoid excessive observation – Too much observation can cause boredom. Limiting observation time can facilitate stronger engagement.
10. Create a positive learning environment – A fun and energetic atmosphere enhances learning, teamwork and collaboration.
11. Set clear expectations – At 30, 60 and 90 days of hiring, provide new employees with a detailed list of what they should know at that stage of their employment.

Core training content

New technicians must familiarize themselves with the basic groups of surgical instruments. These include:

- Scissors
- Needle holders
- Hemostats
- Retractors
- Suction devices
- Scalpel handles
- Tissue and dressing forceps
- Laparoscopic instrumentation

In-depth instrument training

Once the basic instrument groups are understood, a structured training matrix (see **Figure 1**) should be developed to assess and track the new technician's knowledge and proficiency.



Create a Training Matrix:

	Ryan H.	Michelle S.	Liana V.	Patrick R.
Scissor Types	✓	✓	✓	✓
Inspection points	✓			
Sharpness Test	✓			
Lengths	✓			
Needle Holder Types		✓		
Inspection Points			✓	✓
Lengths				✓
Hemostat Types	✓		✓	
Inspection Points	✓		✓	
Lengths	✓			
Common Retractors				✓
Suction Devices	✓		✓	
Tissue & Dressing				✓
Scalpel Handles				✓

Figure 1

Start with scissors – It is essential for new technicians to differentiate between the four types of Mayo scissors, the three types of operating scissors and Metzenbaum scissors (see **Figures 2 and 3**) as they are frequently used. Comprehensive training and testing will ensure technicians’ understanding of these instruments.



Figure 2

Scissor inspection is critically important, and technicians must be taught the proper inspection protocol (see example in **Figure 3**). This includes:

1. Functionality checks – Open and close the scissors to ensure smooth operation without grinding and confirm they are not loose.
2. Detailed inspection – After repeated opening and closing, inspect the screw hinge and tips for any cracks or bioburden.

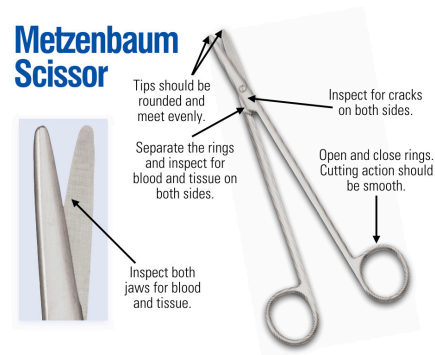
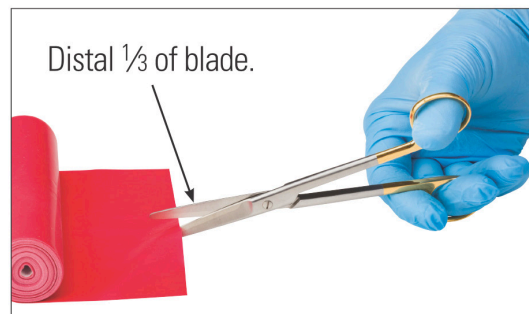


Figure 3

Once a new technician understands the distinctions between each type of Mayo scissor, operating scissor and Metzenbaum scissor, it is essential they learn how to assess sharpness. Yellow scissor sharpness test material should be used for scissors **4 ½" and shorter**. Red scissor sharpness test material should be used for scissors that measure **longer than 4 ½"** (see **Figure 4**). This skill must be mandatory, as every surgical procedure begins with scissors.



Scissor should cleanly cut all the way to the tip.

Figure 4



Needle holders – All new technicians should memorize and be able to identify the six fundamental needle holder patterns (see **Figure 5**).

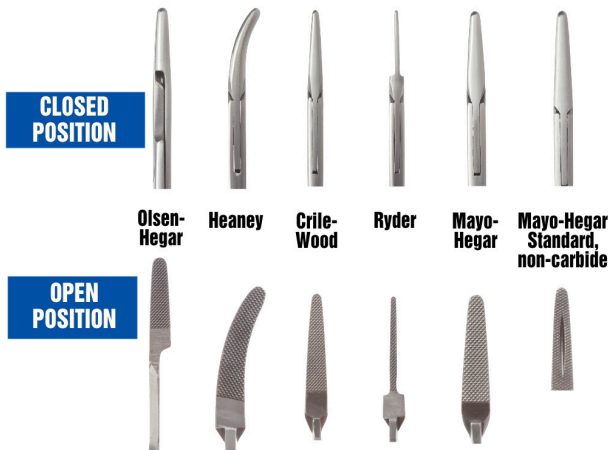


Figure 5

Needle holder inspection begins with a thorough examination of the jaw tread, which is the primary inspection point (see **Figure 6**). Next, the technician should inspect the hinged area for cracks. After that, they should separate the rings and examine the hinged area on both sides for any bioburden.



Figure 6

There are two main types of needle holders: gold-handled, which have tungsten carbide jaws, and standard, which have stainless steel jaws (see **Figure 7**). It is crucial that technicians recognize the differences between these types, as tungsten carbide jaws (again, indicated by gold rings) can be replaced, and standard jaws cannot.

Tungsten Carbide Jaws

- Much harder metal than stainless steel.
- The jaw tread wears out very slowly. Jaws last longer.
- Grips the suture needle better.
- When the jaws wear out, the repair vendor can simply replace.
- Tungsten carbide is indicated by 24-karat gold rings.

Stainless Steel Jaws

Once these jaws wear out, the instrument cannot be re-jawed and must be replaced.

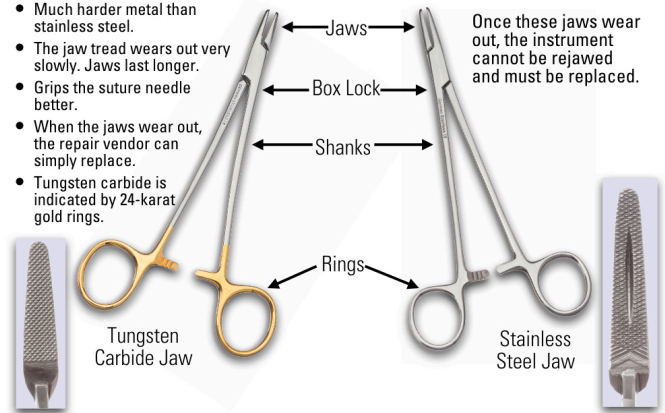


Figure 7

Hemostats – When training new technicians on hemostats, it is vital to always use proper terminology. The six basic hemostat types must be memorized, and the technician should be able to identify and explain the differences among them (see **Figure 8**).

Most Common Hemostats



Figure 8

Once familiar with the hemostat types, the technician must learn their key inspection points. Visual inspections should start at the distal jaws and encompass the following:

1. Check for bioburden at the distal jaws.
2. Inspect the hinge area (box lock) for cracks and bioburden on both sides.

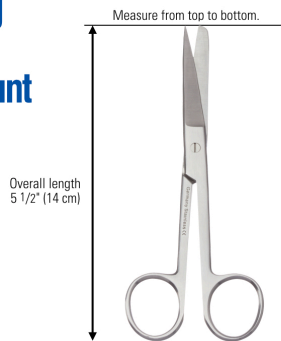


3. Separate the rings and inspect for bioburden.
4. With the rings separated, examine the serrations for bioburden.
5. Test the ratchet by opening and closing it, ensuring it clicks in each position.

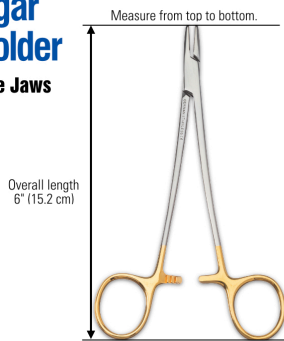
Measuring instruments

In addition to knowing the correct names of common scissors, needle holders, and hemostats, technicians must also be adept at measuring these surgical instruments properly. For accuracy, measurements should be taken from the bottom of the ring to the distal tip (see **Figure 9**).

Operating Scissor, Sharp/Blunt How to Measure



Mayo-Hegar Needle Holder Tungsten Carbide Jaws How to Measure



Rochester-Pean Forcep, Straight How to Measure

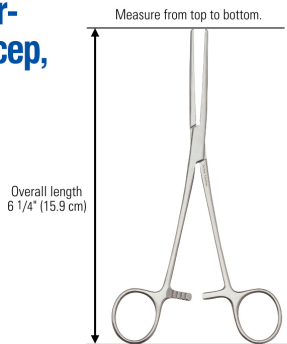


Figure 9

Quiz

From Good to Great: Enhancing the Training Experience for New Technicians

Please answer the five-question quiz to test your comprehension of the content and be entered for a chance to win a set of the author's Instrument Coaching Cards™. To submit your answers, see the instructions and QR code at the end of the quiz.



1. Yellow scissor test material should be used to test the sharpness of a scissor that is exactly 4 1/2". T/F
2. When training a new technician, it is helpful to have them document their training experiences and milestones in a logbook. T/F
3. Focusing on observation and limiting engagement is an effective strategy when training new technicians. T/F
4. The first month of new-employee training is most crucial for setting the tone of the entire training program. T/F
5. A structured training matrix should be developed to assess and track the new technician's knowledge and proficiency. T/F

Scan the QR code to submit your answers online. The deadline to submit is June 9, 2025. All participants' names will be entered into a drawing to win a set of Instrument Coaching Cards™. Good luck! 🍀



RICK SCHULTZ, the Instrument Whisperer™, is an author, inventor, lecturer, and the retired Chief Executive Officer of Spectrum Surgical Instruments Corp. He served as contributing editor of HSPA's *Central Service Technical Manual* (fifth, sixth, seventh and eighth editions). Schultz authored the textbooks *Inspecting Surgical Instruments: An Illustrated Guide* and *The World of Surgical Instruments: The Definitive Inspection Textbook*, which was released in June 2018. In October 2021, Schultz published the veterinary medicine textbook *The World of Surgical Instruments for Animal Health*. Schultz was named HSPA's Educator of the Year in 2002 and the American Hospital Association Educator of the Year in 2006. In 2007, he was named by *Healthcare Purchasing News* as one of the 30 Most Influential People in Healthcare Sterile Processing. Schultz currently provides educational lectures to Sterile Processing professionals at HSPA's annual conferences and conducts Operating Room personnel lectures across the country.

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