

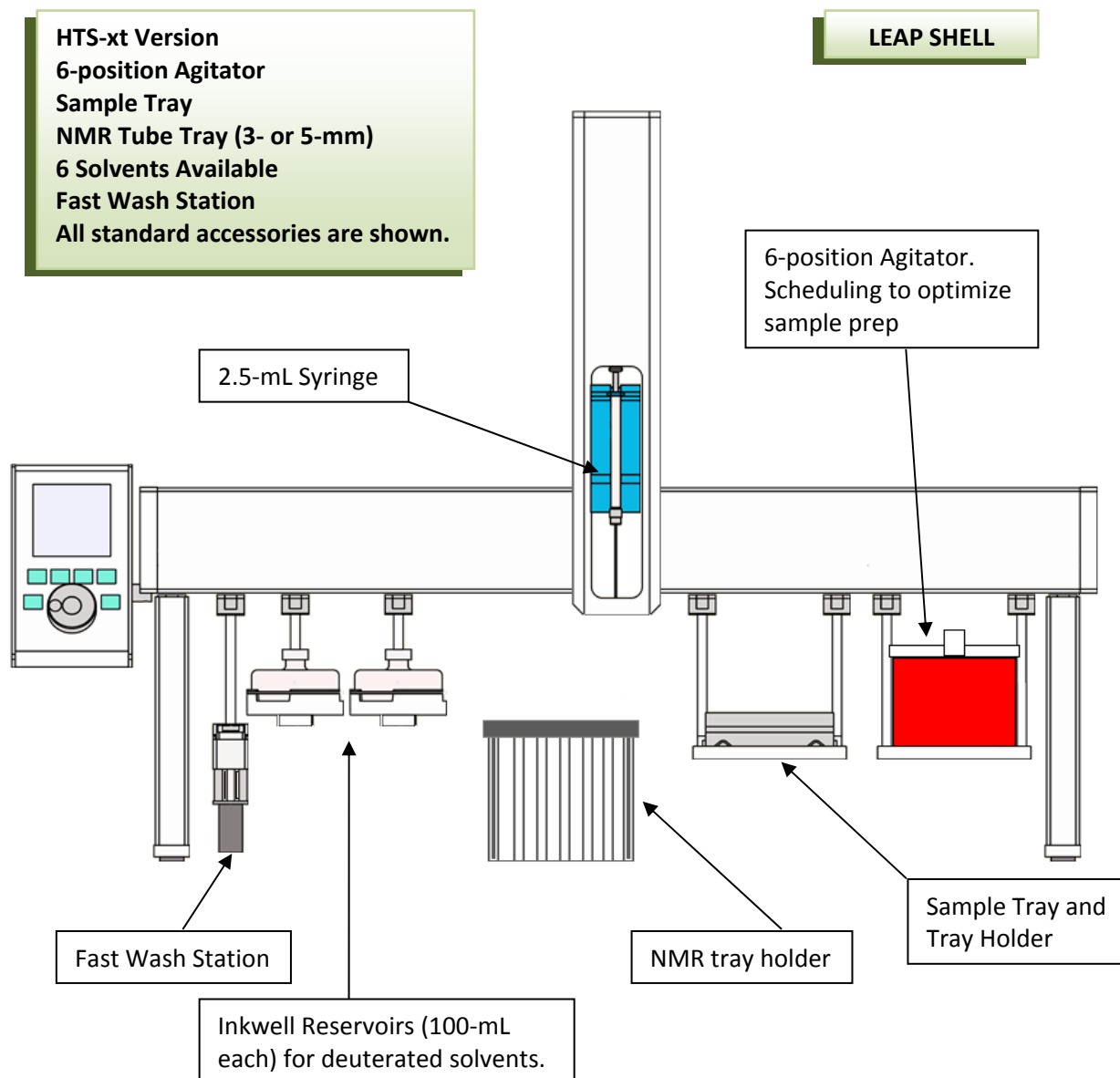


NMR Prep Stations offered by LEAP.

Currently there are four main systems for NMR Prep and/or delivery of sample and solvent to a NMR tube using a PAL system and either LEAP Shell or Peak Harvester applications.

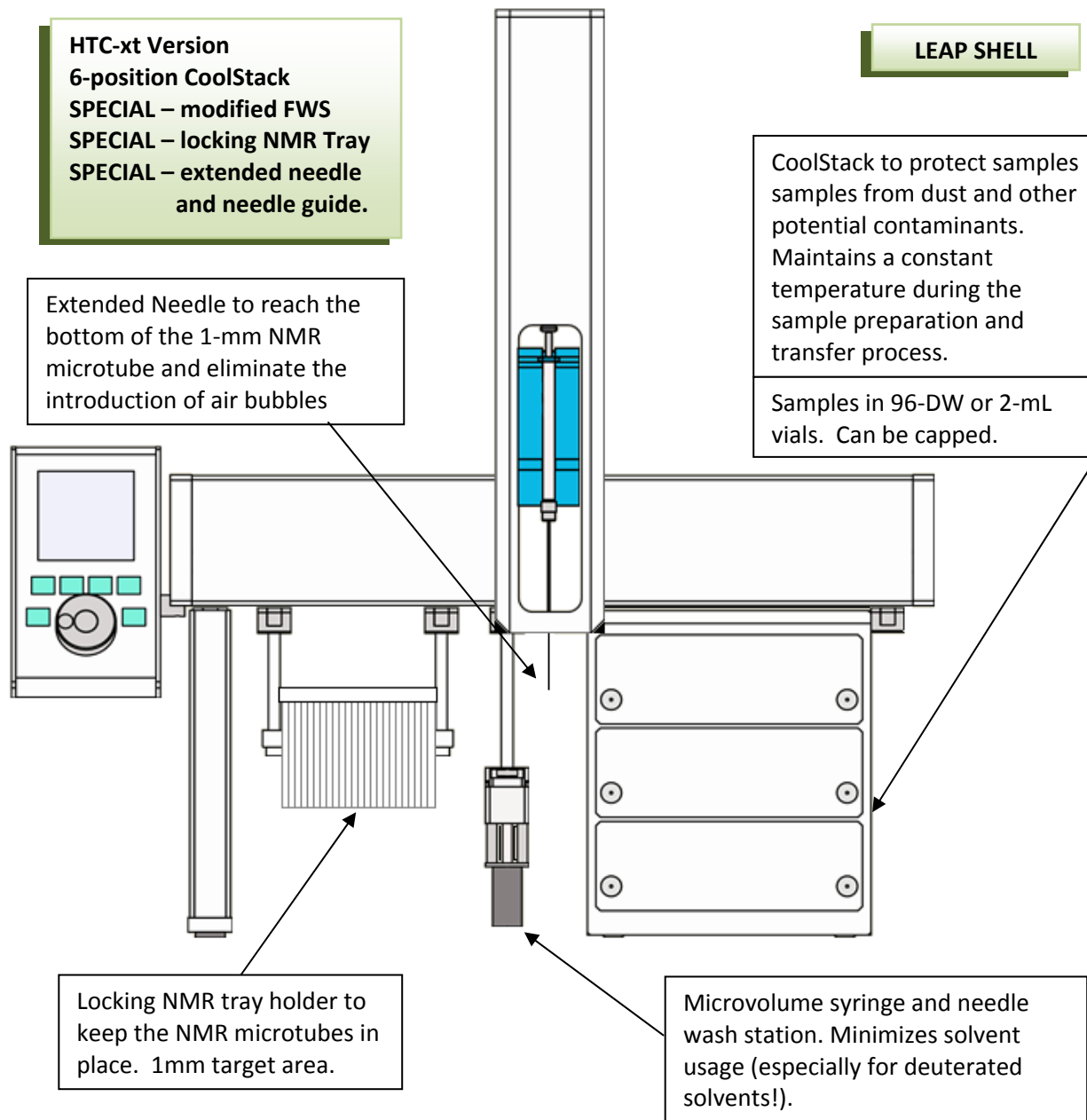
These fall into the categories and descriptions of the systems as shown below.

1) Sample Handling/Agitation/3- or 5-mm NMR Tube fill



NMR Prep and Transfer. Includes: Agitation and mixing for reconstituting samples with deuterated solvents. Either Ambient Temperature with standard configuration or can integrate CoolStacks or Trays. The system uses LEAP Shell Software to optimize sample preparation. Up to 6 deuterated solvents can be selected. (Base ~ \$30,000 – 33,000)

- 2) Sample Delivery into 1-mm NMR Tubes
 ORIGINAL CUSTOMER – BMS
 ISSUES – TIME, SAMPLE HANDLING, NUMBER OF SAMPLES TO PROCESS, MANUAL HANDLING OF THE SMALL TUBES AND SAMPLE SIMULTANEOUSLY, VARIATIONS TUBE TO TUBE AND SAMPLE TO SAMPLE.

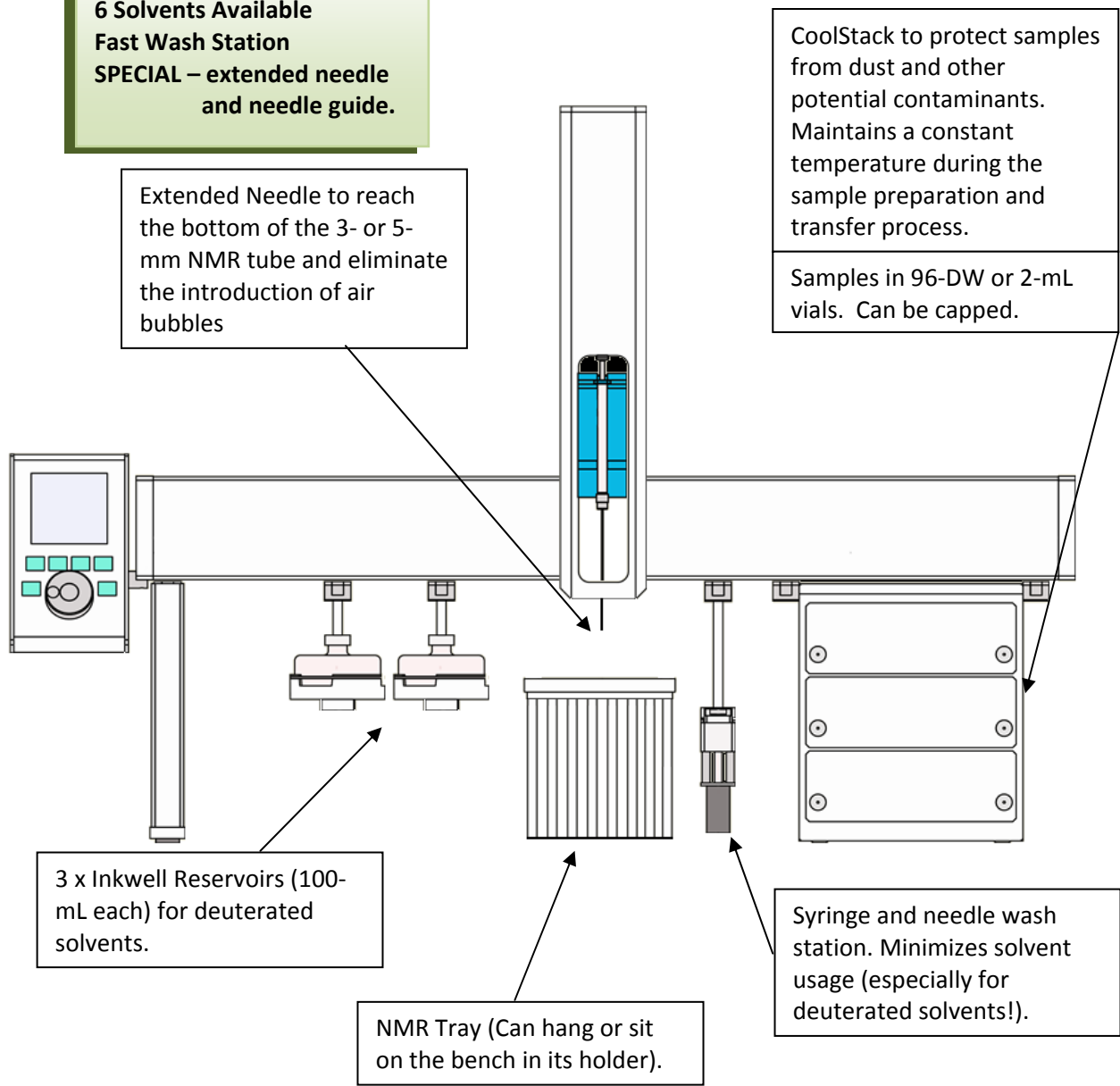


MICROTUBE NMR Fill. Includes: Specialty Syringe with an extended needle for bottom-to-top filling in stepwise process to eliminate air bubbles in these fine 1-mm NMR Microtubes. Use a Stack or CoolStack to protect samples. The compact system can handle a rack of 96-microtubes. Specifically designed tray holder and needle guide allow for accurate and tight tolerance for the 1-mm target. (Base ~ \$29,500 – 31,000)

3) 3-mm NMR Tubes and 5-mm NMR Tubes

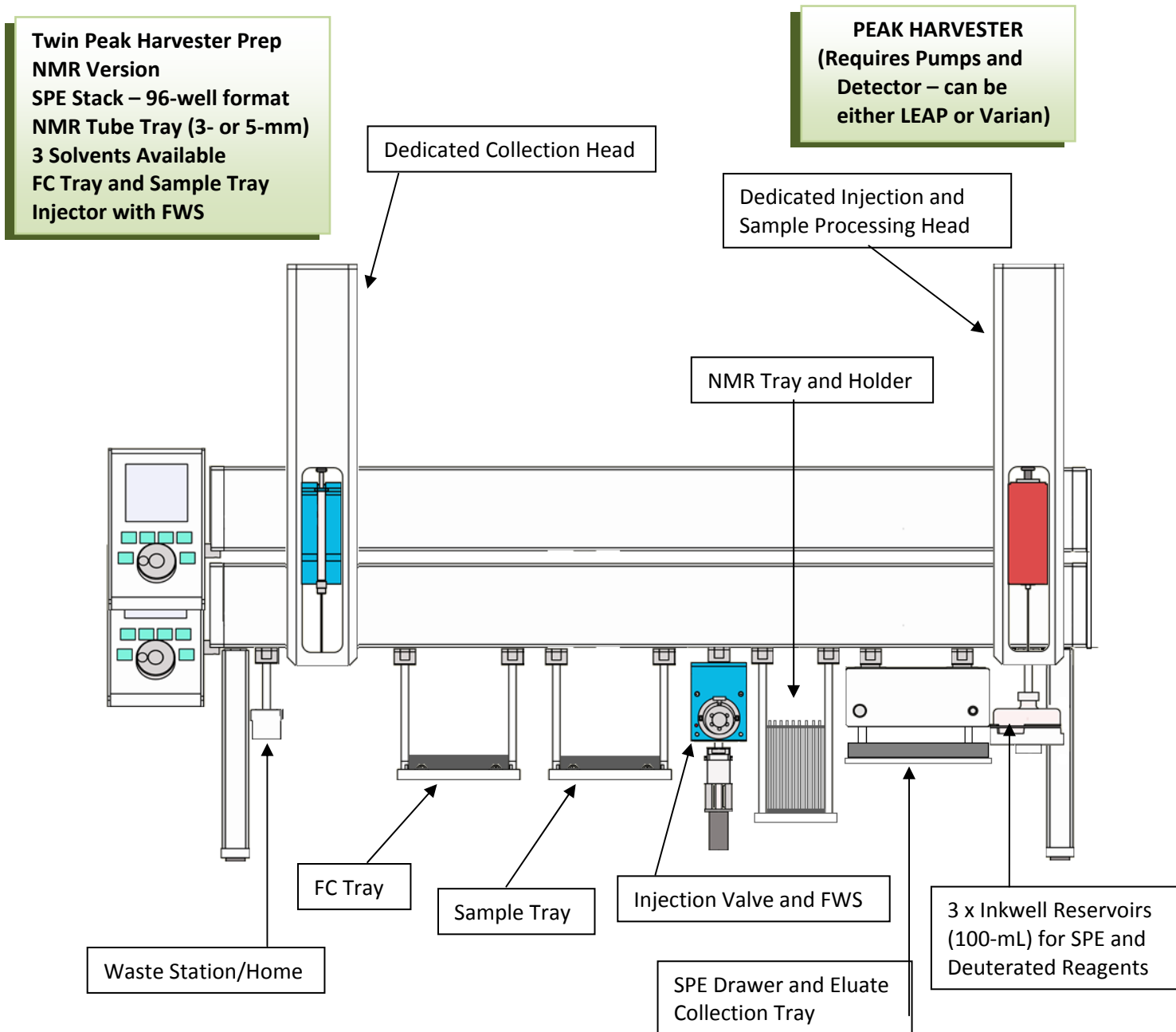
HTS-xt Version
6-position CoolStack
NMR Tube Tray (3- or 5-mm)
6 Solvents Available
Fast Wash Station
SPECIAL – extended needle
and needle guide.

LEAP SHELL



Basic NMR Sample Prep and Transfer. Includes: Basic package and procedure run by LEAP SHELL to allow a researcher to reconstitute a pre-dried sample with a deuterated solvent and transfer the sample into a standard 3- or 5-mm NMR tube. The wash station is modified to minimize solvent usage and time. The fill procedure is optimized using a bottom-to-top filling process. Additional NMR tray holders can be added to increase capacity. (Base - \$30,000 – 32,000)

4) Peak Purification/SPE Trap and Release/3- or 5-mm NMR Tube fill



Sample Isolation, SPE, and NMR. Includes: Peak Harvester operated system with post-fractionating scripts for sample handling after purification. This system integrates HPLC purification with SPE functionality and other transfer and sample handling processes using the PAL. The ability of Peak Harvester to use standard sample processing scripts – either as standalone methods or batch operation following purification – turns this system into a full impure to NMR Tube sample instrument. (Base ~ \$60,000 – 65,000)