

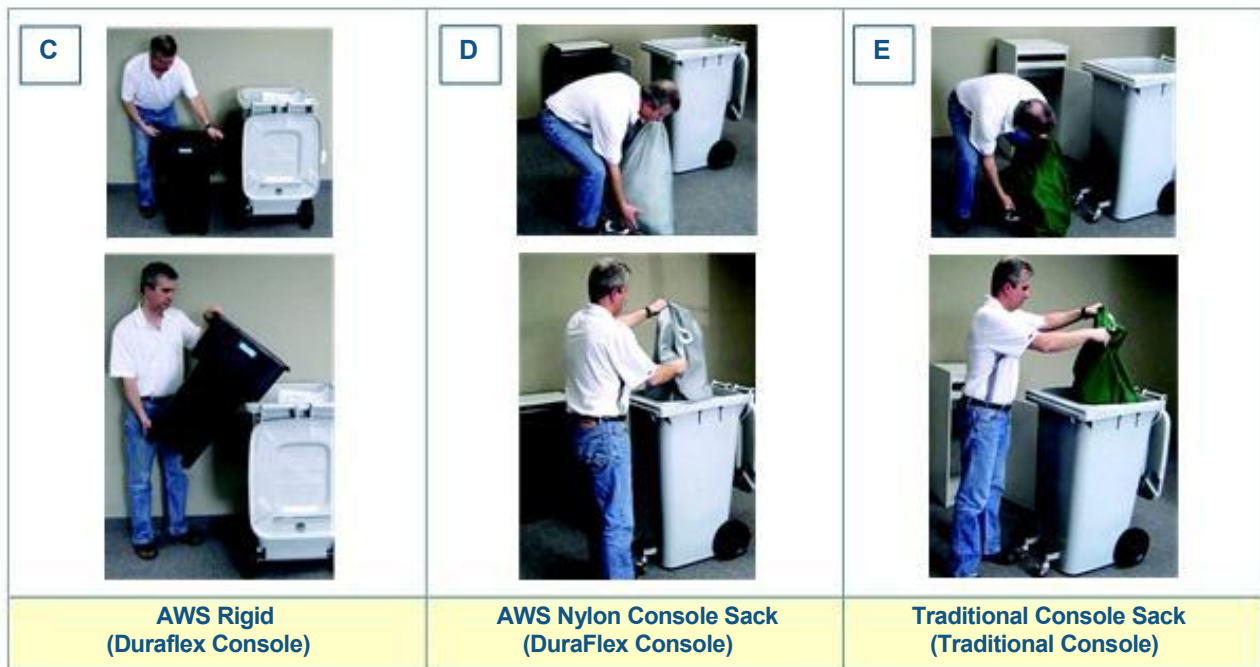
Console Inserts

Removal From Console



Criteria	C	D	E
Retrieval Height (vertical)	762mm	749mm	660mm, 749mm
Retrieval Reach (horizontal)	Negligible	375mm	381mm
Approximate Time Removing (unlocking console, removing insert, dumping, re-locking console)	17 sec	41 sec	53 sec
Posture: Retrieval	<ul style="list-style-type: none"> • Standing • Moderate back flexion • Sustained for approximately 2 sec 	<ul style="list-style-type: none"> • Squatting • Extended shoulders • Sustained for approximately 5 sec 	<ul style="list-style-type: none"> • Kneeling • Extended shoulders • Neck forward and side flexion • Sustained for approximately 9 sec

Lifting and Dumping Console Inserts





Criteria	C	D	E
Lifting retrieval height (vertical)	762mm	152mm	152mm
Grip	Good	Fair	Fair
Maximum Weight Capacity	27 kilo	45 kilo	45 kilo
Posture: Lifting	<ul style="list-style-type: none"> • Standing • Moderate back flexion • Even, balanced grip 	<ul style="list-style-type: none"> • Standing/squatting • Extreme back flexion • Uneven grip • Unbalanced load 	<ul style="list-style-type: none"> • Standing/squatting • Extreme back flexion • Uneven grip • Unbalanced load
Posture: Dumping	<ul style="list-style-type: none"> • Standing upright • Support weight of load on side of bin 	<ul style="list-style-type: none"> • Standing upright • Extended shoulders 	<ul style="list-style-type: none"> • Standing upright • Extended shoulders
Risk (Insert at 100% Capacity)	Moderate NIOSH LI*: 1.29	Moderate NIOSH LI: 2.91	Moderate NIOSH LI: 2.91
Risk (Insert at 75% Capacity)	Low NIOSH LI: 0.97	Moderate NIOSH LI: 2.18	Moderate NIOSH LI: 2.18
Risk (Insert at 50% Capacity)	Low NIOSH LI: 0.65	Moderate NIOSH LI: 1.45	Moderate NIOSH LI: 1.45
Risk (Insert at 25% Capacity)	Low NIOSH LI: 0.32	Low Low NIOSH LI: 0.73	NIOSH LI: 0.73

*LI = Lifting Index

General Conclusions




Executive Consoles

Based on testing, objective measures, and professional judgment, the preferred executive console is **A**, the **All Source DuraFlex Console**. The “checkmark” and “X” determine acceptability when compared to ergonomic design guidelines and usability.

Executive Console	Dimensions	i Features	Comments
<p>A</p>  <p>All Source DuraFlex Console</p>	<p>✓</p>	<p>✓</p>	<p>Positive</p> <ul style="list-style-type: none"> • Document deposit height is within recommended material handling range (610mm – 1575mm) above the standing surface. • Lock height is within recommended material handling range (610mm – 1575mm) above the standing surface. • Door opens 180° to provide full access to contents. • The fifth hook reduces gaps forming between the sack and the console as the sack fills, preventing documents from falling between the sack and the console, and minimises unnecessary loose material handling. • The plastic hooks prevent the console sack from moving and falling off the hooks as the sack fills, preventing documents from falling between the sack and the console, and minimises unnecessary loose material handling. • The plastic hooks prevent puncturing and tearing of nylon console sacks, lengthening the life of the sacks. <p>Negative</p> <ul style="list-style-type: none"> • Awkward to lift by sole operator when sack full; it is recommended that a 2 man operation or mechanical lift device used.
<p>B</p>  <p>Traditional Console</p>	<p>✓</p>	<p>✗</p>	<p>Positive</p> <ul style="list-style-type: none"> • Document deposit height is within recommended material handling range (610mm – 1575mm) above the standing surface. <p>Negative</p> <ul style="list-style-type: none"> • Heavy and awkward to lift by solo operator; it is recommended that a 2 man operation be employed or a mechanical lift mechanism used. • Lock height is too low (546mm) – outside of the recommended material handling range of 610mm to 1575mm from standing surface • Four hook design allows for console / sack gaps as the sack fills. This may result in documents falling outside of the sack within the console, increasing material handling and on-task timings • Hook design allows for console sack movement. This may result in documents falling outside of the sack within the console, increasing material handling and on-task timings • Metal hook design may puncture or tear the nylon sack, shortening lifespan and may also affect security aspect.

Console Inserts

Based on testing, objective measures, and professional judgment, the preferred console insert is **C**, the **All Source Plastic Insert (Version 3)**. The “checkmark” and “X” determine acceptability when compared to ergonomic design guidelines and usability.

Console Insert	Retrieval	ifti Dumping	Comments
<p>C</p>  <p>All Source Plastic Insert (Version 3)</p>	<p>✓</p>	<p>✓</p>	<p>Positive</p> <ul style="list-style-type: none"> • Quick, easy retrieval and return • Neutral postures during handling • Lip rests on shred bin when dumping contents • Console only needs to be open 90° to retrieve and return • Multi-directional; cannot be put in console backwards • Durable <p>Negative</p> <ul style="list-style-type: none"> • Not recommended to carry up and down stairs
<p>D</p>  <p>All Source Console Sack (DuraFlex Console)</p>	<p>✓</p>	<p>✗</p>	<p>Positive</p> <ul style="list-style-type: none"> • Easy retrieval and put away (all hooks within line of sight) • Durable • Can be dragged down stairs <p>Negative</p> <ul style="list-style-type: none"> • Load shifts inside sack when lifting • Load capacity of sack is too high (45 kilo) • Not recommended to carry up stairs • Uni-directional; can be put in console backwards • Time on task is significantly longer compared to inserts
<p>E</p>  <p>Traditional Console Sack (Traditional Console)</p>	<p>✗</p>	<p>✗</p>	<p>Positive</p> <ul style="list-style-type: none"> • Durable • Can be dragged down stairs <p>Negative</p> <ul style="list-style-type: none"> • Awkward postures during retrieval and reset (rear hooks not visible) • Load shifts inside sack when lifting • Not recommended for carrying up stairs • Uni-directional; can be inserted into console backwards • Time on task significantly longer compared to rigid inserts.