

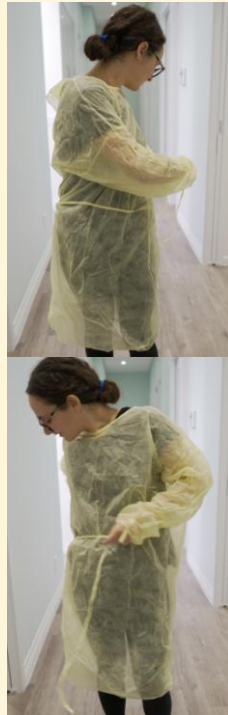
“EASY-TIE” ISOLATION GOWN: **SOLVING PROBLEMS THAT MATTER** **EASY TO DON, EASY TO TIE, EASY TO PROTECT**



Problem 1: Healthcare workers not tying the waist-tie on isolation gowns

Cause

- Existing waist-tie designs all force healthcare workers to reach behind their back to either tie the gown blindly or to pass the tie around their body and bring it back to the front or side
- For many this takes too much time and creates frustration
- Painful or difficult for many with neck, back, stomach or shoulder soreness or injuries
- In some cases, requiring a colleague to stop their work to assist a healthcare worker who cannot reach behind their back or use both hands is the only solution



Impact

- Major infection control and cross-contamination risk
- Risk of injury with untied waist-ties often dangling close to or below the workers feet
- Against facility protocols and puts the facility at risk



Solution

“Easy-tie” gown design allows the healthcare worker to meet infection prevention protocols and properly secure the waist-tie of their gown quickly, easily and without having to reach behind their back at any point in the process.

Problem 2: Time wasted tying waist-ties behind the back or bringing the tie from back to the front/side

Cause

- Current designs force the worker to:
- Pass a long tie from the front or side, behind their back to their other hand and bring it around to the front or side and then tie in front or on the side, or;
- Take ties from the front or each side and reach behind their back and tie blindly (time consuming, difficult)



Impact

- Wasted time for workers putting on a gown, multiple times a day in almost every department in a facility
- Lack of Time or Frustration leading to not tying, causing non-compliance and risk
- 8 – 10 seconds, or more, to tie current designs is time wasted and an additional reason for non-compliance (Easy-Tie design takes 4 seconds)



Solution

“Easy-tie” gown design cuts tying time in half: approx. 4-5 seconds of time saving may seem small but extrapolate to 1000 healthcare workers in a facility saving 4 seconds on average 16 times per day = 17.78 hours of saved time each day...over 6,400 saved hours per year per facility of that size

Problem 3: Even Full-Back gowns leave a gap in the center of the back

Cause

- Full-Back gowns are designed to cover as much of the back as possible for healthcare workers but will usually hang down on both sides of the back leaving a gap in the center due to the need for cost effective manufacturing methods
- Majority of waist-ties are attached in the front or side of the gown for the tie to then pass behind the back and around
- This standard design has the back material hanging straight down and no part of the tying process forces the back of the gown to move across and close when tying. To close the back would require an additional action and reaching behind the worker's back



Impact

- Risk of contamination and/or soiling of skin or non-fluid resistant apparel due to exposure to fluids and other contaminants



Solution

“Easy-tie” gown design allows the healthcare worker to pull the back of the gown across and close fully using the same motion used to tie the waist-tie

Problem 4: Loose-hanging waist-ties are long and often hit the floor

Cause

- The waist-tie on many gowns is designed in a way that results in one end of the tie potentially hitting the ground or shoes when unfolding or donning the gown
- Lack of innovation - this is considered a minor issue by most manufacturers but not considered minor by infection control committees
- Changes in designs to allow gowns to be secured in the front or side (rather than the back which is increasingly difficult) required the extension of one or both sides of the tie



Impact

- Risk of injury: multiple cases have been reported every year of healthcare workers tripping on a low hanging waist-tie while trying to put on their gown while walking towards a room or a patient
- Contamination: any part of a clean gown coming into contact with the floor or shoe and then the body or hand of a healthcare worker will carry contaminants from the floor to the worker, the gown and potentially to the patient



Solution

“Easy-tie” gown comes out of the pack with the waist-tie secured as part of the closure design to solve this problem

Problem 5: No visibility of non-compliance for Infection Prevention or Control Managers

Cause

- Current designs have no way for Managers to see, from any distance, if gowns have been properly donned and tied

Impact

- Managers either do not know and cannot help with improving compliance or they must waste time going to multiple locations all over the floor to check, continuously



Solution

“Easy-tie” gown can be made with the option of a different color waist-tie that is draped over-the-shoulder and gives Managers a visual cue to be able to see if gowns have been donned properly from across the floor

Design Concern: Will this design increase costs and add complexity to the manufacturing process?

Cause of Potential Concern

- Cost controlled commodity product category
- Tight industry budgets for this category will not allow for med./high impact cost increases, even minor cost increases will impede the ability to show true value to a customer...even with an innovative design

Impact of Complexity or Raw Cost Increase

- Cost increases due to the need for additional materials in new designs is often unavoidable and extremely difficult to offset
- Changes in the method of manufacturing will cause the need for additional equipment investment or the development of new processes that will in-turn lower manufacturing efficiencies and increase cost

Response

- “Easy-tie” gown design requires no extra material volume beyond what is currently needed in the existing manufacturing process. The change is the location and direction
- No additional types of materials, outside of those normally used in current manufacturing of gowns, is needed
- No unique or different methods of manufacturing are needed (no equipment, staff or speed impact). Only a small change in where on the gown they use certain existing methods
- This design can be manufactured as an innovative solution without a cost increase to the customer or sold at a premium as a value-added solution

Patented Countries

Country/Region	Status	Option
European Union (32 countries, see next page for listing)	Patent Issued	Patented Launch Available
China & Macao	Patent Issued	Patented Launch Available
Japan	Patent Issued	Patented Launch Available
Hong Kong	Patent Issued	Patented Launch Available
South Korea	Patent Issued	Patented Launch Available
Australia	Patent Issued	Patented Launch Available
Israel	Patent Issued	Patented Launch Available
Mexico	Patent Issued	Patented Launch Available
USA	Patents Issued (Utility & Design)	Patented Launch Available December 2026
Canada	Patents Issued (Utility & Design)	Patented Launch Available December 2026

EU Patented Countries

Austria	Iceland	Poland
Belgium	Ireland	Portugal
Bulgaria	Italy	Romania
Croatia	Lithuania	Serbia
Czech Republic	Luxembourg	Slovak Republic
Denmark	Malta	Slovenia
Finland	Monaco	Spain
France	Morocco	Sweden
Germany	Netherlands	Switzerland/Liechtenstein
Greece	Norway	Turkey
Hungary		United Kingdom